

## FERTILIZERS

[A preliminary report for this industry was issued on Oct. 16, 1934]

**Description of the industry.**—This industry consists in the manufacture of commercial fertilizers, of which the principal classes are complete fertilizers (mixtures of superphosphates, potash, and ammoniates) and superphosphates. It does not include the merchandising of fertilizer materials for use in the natural state, nor of tankage from meat-packing establishments for use without remanufacture.

**Extent of coverage.**—The 1933 coverage of the establishments reporting in this industry for 1931 was practically complete. Of the 599 such establishments, 24 failed to supply any information in regard to their status (active, idle, etc.) or their activities in 1933, but these establishments accounted for only slightly more than 1 percent of the total number of wage earners and less than 1 percent of the total value of products reported for the industry for 1931.

**TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931**

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
				Thousands of dollars. (See sec. 25, p. 13)				
United States								
1933-----	522	2,316	13,063	3,884	7,274	69,053	94,939	25,886
1931-----	599	( <sup>4</sup> )	14,551	( <sup>4</sup> )	12,146	106,481	154,350	47,869
1929-----	638	4,051	20,926	9,398	17,884	159,801	232,511	72,710
1927-----	621	3,980	18,612	8,936	17,650	138,143	190,385	52,242
States								
Alabama:								
1933-----	28	95	680	131	221	3,042	3,677	635
1931-----	40	( <sup>4</sup> )	726	( <sup>4</sup> )	390	4,418	6,348	1,930
Arkansas:								
1933-----	7	16	37	17	15	229	274	45
1931-----	10	( <sup>4</sup> )	76	( <sup>4</sup> )	38	573	659	85
California:								
1933-----	22	80	240	154	214	1,474	2,297	823
1931-----	26	( <sup>4</sup> )	225	( <sup>4</sup> )	262	2,324	3,416	1,091
Connecticut:								
1933-----	6	53	118	81	85	905	1,425	520
1931-----	6	( <sup>4</sup> )	140	( <sup>4</sup> )	130	1,382	2,085	703
Delaware:								
1933-----	7	15	63	23	25	257	347	90
1931-----	6	( <sup>4</sup> )	58	( <sup>4</sup> )	57	400	585	185
Florida:								
1933-----	29	192	937	324	502	6,129	8,812	2,683
1931-----	25	( <sup>4</sup> )	809	( <sup>4</sup> )	628	7,962	11,747	3,735
Georgia:								
1933-----	84	274	1,525	398	567	7,098	8,827	1,729
1931-----	116	( <sup>4</sup> )	1,977	( <sup>4</sup> )	1,119	12,906	18,542	5,635
Illinois:								
1933-----	11	72	161	142	120	1,458	2,095	637
1931-----	13	( <sup>4</sup> )	394	( <sup>4</sup> )	373	4,096	5,892	1,796

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
Thousands of dollars. (See sec. 25, p. 13)								
<i>States—Continued</i>								
Indiana:								
1933.....	10	45	159	75	96	1,083	1,561	478
1931.....	10	( <sup>4</sup> )	169	( <sup>4</sup> )	180	1,925	2,840	915
Louisiana:								
1933.....	6	55	170	110	87	1,060	1,338	278
1931.....	11	( <sup>4</sup> )	323	( <sup>4</sup> )	222	2,229	3,454	1,225
Maine:								
1933.....	10	29	110	52	70	1,200	1,672	471
1931.....	11	( <sup>4</sup> )	150	( <sup>4</sup> )	143	2,531	3,599	1,068
Maryland:								
1933.....	37	319	1,619	573	1,198	8,789	12,611	3,822
1931.....	35	( <sup>4</sup> )	1,861	( <sup>4</sup> )	2,117	12,027	17,806	5,779
Massachusetts:								
1933.....	7	24	250	43	205	1,974	2,513	539
1931.....	6	( <sup>4</sup> )	360	( <sup>4</sup> )	419	2,897	3,896	999
Mississippi:								
1933.....	8	25	226	41	78	860	1,104	243
1931.....	12	( <sup>4</sup> )	281	( <sup>4</sup> )	146	1,663	2,596	933
New Jersey:								
1933.....	17	88	458	173	475	2,958	4,329	1,371
1931.....	20	( <sup>4</sup> )	495	( <sup>4</sup> )	676	3,812	5,512	1,700
New York:								
1933.....	12	39	192	66	157	1,437	1,849	412
1931.....	13	( <sup>4</sup> )	210	( <sup>4</sup> )	270	2,239	2,759	520
North Carolina:								
1933.....	57	207	1,354	340	534	6,759	9,197	2,438
1931.....	68	( <sup>4</sup> )	1,497	( <sup>4</sup> )	944	10,455	15,244	4,789
Ohio:								
1933.....	22	139	635	245	519	4,578	6,677	2,099
1931.....	24	( <sup>4</sup> )	730	( <sup>4</sup> )	832	6,622	9,929	3,307
Pennsylvania:								
1933.....	23	73	422	113	355	1,944	2,913	970
1931.....	25	( <sup>4</sup> )	489	( <sup>4</sup> )	504	3,183	4,836	1,654
South Carolina:								
1933.....	39	129	1,158	192	419	4,541	5,527	986
1931.....	41	( <sup>4</sup> )	1,071	( <sup>4</sup> )	673	6,071	8,349	2,279
Tennessee:								
1933.....	9	56	301	94	140	1,568	2,209	641
1931.....	8	( <sup>4</sup> )	366	( <sup>4</sup> )	298	2,492	3,662	1,170
Texas:								
1933.....	6	20	59	18	24	319	445	126
1931.....	12	( <sup>4</sup> )	86	( <sup>4</sup> )	51	643	1,080	437
Virginia:								
1933.....	43	181	1,737	324	765	7,353	10,078	2,725
1931.....	40	( <sup>4</sup> )	1,475	( <sup>4</sup> )	1,039	10,336	14,473	4,137
Washington:								
1933.....	4	9	16	12	13	128	185	57
1931.....	4	( <sup>4</sup> )	20	( <sup>4</sup> )	22	129	216	86
Wisconsin:								
1933.....	3	14	42	32	33	168	377	209
Other States: <sup>5</sup>								
1933.....	15	67	395	112	355	1,743	2,601	858
1931.....	17	( <sup>4</sup> )	563	( <sup>4</sup> )	608	3,167	4,825	1,659

<sup>1</sup> Not including proprietors and firm members, as follows: 1933, 86; 1931, no data; 1929, 139; 1927, 119.<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.<sup>3</sup> Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.<sup>4</sup> No data.<sup>5</sup> Figures for 1931 included in those for "Other States" to avoid disclosing data for individual establishments.<sup>6</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Kans., 2, 2; Ky., 2, 2; Mich., 3, 3; Minn., 2, 1; Mo., 0, 1; Mont., 1, 1; Nebr., 1, 1; Nev., 1, 1; R. I., 1, 1; Vt., 1, 1; W. Va., 1, 1; Wis., (1931), 2.

TABLE 2.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, 1933 AND 1931, AND BY KIND AND QUANTITY, 1929, FOR THE UNITED STATES

[Ton, 2,000 pounds]

	1933	1931 Comparable with 1933 <sup>1</sup>	1931 As published
1. "Fertilizer" industry, all products, total value.....	\$94,939,311	-----	\$154,349,887
2. Fertilizers.....	76,768,916	\$131,659,564	134,384,776
3. Other products (not normally belonging to the industry).....	14,836,399	18,168,898	19,965,111
4. Fertilizers and other products, not reported separately (on abbreviated schedule) <sup>2</sup> .....	3,333,996	-----	-----
5. Fertilizers made as secondary products in other industries, value.....	6,042,037	5,499,711	6,333,125
Fertilizers, aggregate (2 and 5).....	82,810,953	137,159,275	140,717,901

  

	QUANTITY IN THOUSANDS OF TONS <sup>3</sup>				VALUE IN THOUSANDS OF DOLLARS <sup>4</sup>	
	1933 Reported on standard schedule <sup>5</sup>	1931 Comparable with 1933 <sup>1</sup>	1931 As published; comparable with 1929	1929	1933 Reported on standard schedule <sup>5</sup>	1931 Comparable with 1933 <sup>1</sup>
Fertilizers, total.....	5,196	6,814	6,968	9,320	82,811	137,159
Complete fertilizers, total.....	3,274	4,461	4,545	5,992	61,180	107,982
Plant-food content reported <sup>6</sup> .....	2,506	3,366	3,425	4,143	-----	-----
Plant-food content not reported.....	768	1,096	1,120	1,849	-----	-----
Superphosphates (except potash), including concentrated phosphates <sup>7</sup> .....	1,546	1,964	1,968	2,531	12,882	20,639
Fish scrap.....	47	38	46	85	1,487	1,168
Potash superphosphate, total.....	87	145	149	211	1,385	2,914
Plant-food content reported <sup>6</sup> .....	64	132	136	167	-----	-----
Plant-food content not reported.....	23	12	14	45	-----	-----
Bone meal.....	21	18	52	40	480	676
Other fertilizers.....	222	188	208	462	5,397	3,781

<sup>1</sup> See sec. 5c, p. 4. The figures given in this column represent the production, in 1931, of those classes of establishments (not in all cases the same individual establishments) which reported on the standard schedule for 1933.

<sup>2</sup> See sec. 5c, p. 4.

<sup>3</sup> See sec. 25, p. 13.

<sup>4</sup> Average percentage: Nitrogen (N)—1933, 3.2; 1931, as adjusted, 3.2; 1931, as published, 3.2; 1929, 2.7. Phosphorus (P<sub>2</sub>O<sub>5</sub>)—1933, 8.8; 1931, as adjusted, 8.7; 1931, as published, 8.6; 1929, 8.5. Potassium (K<sub>2</sub>O)—1933, 4.7; 1931, as adjusted, 4.6; 1931, as published, 4.6; 1929, 4.4.

<sup>5</sup> Basis 18 percent available phosphoric acid.

<sup>6</sup> Average percentage: Phosphorus (P<sub>2</sub>O<sub>5</sub>)—1933, 11.3; 1931, as adjusted, 11.3; 1931, as published, 11.4; 1929, 12.1. Potassium (K<sub>2</sub>O)—1933, 7.6; 1931, as adjusted, 7.6; 1931, as published, 7.5; 1929, 7.6.

TABLE 3.—WAGE EARNERS, BY QUARTERS, FOR SELECTED STATES: 1933 AND 1931

[The average for the year (table 1) differs from the average of the quarterly figures below. (See fourth sentence, sec. 13, p. 8.) See sec. 26, p. 13.]

	1933 <sup>1</sup>				1931			
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
United States.....	16,369	8,938	12,333	13,105	23,118	9,821	12,667	11,025
States								
Alabama.....	1,039	209	553	712	1,552	346	460	443
Arkansas.....	64	30	29	22	159	16	34	30
California.....	240	205	260	273	281	175	210	218
Connecticut.....	127	117	84	143	194	149	70	90
Delaware.....	38	60	102	20	28	44	122	3
Florida.....	370	820	984	1,223	986	603	679	859
Georgia.....	2,538	706	958	1,664	4,769	915	1,363	1,404
Illinois.....	172	104	223	151	512	229	429	350
Indiana.....	108	141	294	150	192	151	223	87
Louisiana.....	280	144	65	144	617	156	285	239
Maine.....	99	73	67	134	249	71	118	128
Maryland.....	1,596	1,254	1,917	1,695	2,388	1,605	1,852	1,301
Massachusetts.....	241	162	196	282	472	263	337	324
Michigan.....	201	128	289	290	243	304	259	256
Mississippi.....	310	96	168	270	499	134	238	202
New Jersey.....	537	352	435	474	579	373	468	451
New York.....	186	205	219	171	215	194	191	157
North Carolina.....	2,107	710	912	1,045	2,734	834	945	1,127
Ohio.....	463	560	1,086	626	863	621	1,110	579
Pennsylvania.....	407	327	542	475	646	422	473	416
South Carolina.....	1,769	815	729	1,053	2,143	562	828	827
Tennessee.....	404	163	220	290	414	169	280	265
Texas.....	96	35	39	65	176	16	89	46
Virginia.....	1,927	1,364	1,722	1,398	1,748	1,153	1,358	925
Washington.....	14	10	27	9	30	9	35	8
Wisconsin.....	29	32	52	49	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )

<sup>1</sup> See secs. 5, p. 4, and 13, p. 8. The 437 establishments canvassed with the standard schedule reported wage earners, by months, as follows:

January.....	10,277	May.....	12,581	September.....	11,430
February.....	11,852	June.....	8,374	October.....	11,948
March.....	15,637	July.....	8,209	November.....	11,892
April.....	25,016	August.....	8,972	December.....	12,674

<sup>2</sup> Withheld to avoid disclosing data for individual establishments.



## INK, PRINTING

[A preliminary report for this industry was issued on September 27, 1934]

**Description of the industry.**—This industry embraces establishments engaged primarily in the production of printing inks of various colors, gold and bronze inks, and lithographing inks.

**Extent of coverage.**—The 1933 coverage of the establishments reporting in this industry for 1931 was practically complete. Of the 171 such establishments, only 3 failed to supply any information in regard to their status (active, idle, etc.) or their activities in 1933, and these establishments accounted for only a fraction of 1 percent of the total number of wage earners and of the total value of products reported for the industry for 1931.

### SUMMARY FOR THE UNITED STATES: 1927 TO 1933

	Number of establishments <sup>1</sup>	Number of salaried employees <sup>2</sup>	Number of wage earners (average for the year)	Salaries <sup>3</sup>	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>4</sup>
				Thousands of dollars. (See sec. 25, p. 13)				
<i>United States</i>								
1933-----	160	625	2,094	1,431	2,663	12,604	26,166	13,563
1931-----	171	( <sup>5</sup> )	2,247	( <sup>7</sup> )	3,479	14,532	32,188	17,656
1929-----	147	1,113	2,443	4,312	3,957	19,205	42,750	23,545
1927-----	123	958	2,288	3,314	3,665	16,054	37,734	21,630

<sup>1</sup> The numbers of establishments for years prior to 1931 are not strictly comparable with those shown for 1931 and 1933 because the figures for the later years cover branch plants producing printing inks from base ink, such plants not having been reported as separate establishments for the earlier years. The effect of this change on the other items is slight.

<sup>2</sup> Not including proprietors and firm members, as follows: 1933, 32; 1931, no data; 1929, 36; 1927, 36.

<sup>3</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.

<sup>4</sup> Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.

<sup>5</sup> States included and numbers of establishments reporting for 1933, are: California, 6 establishments; Colorado, 1; Georgia, 2; Illinois, 23; Indiana, 2; Iowa, 1; Louisiana, 3; Maryland, 1; Massachusetts, 6; Michigan, 6; Minnesota, 2; Missouri, 12; New Hampshire, 1; New Jersey, 12; New York, 39; Ohio, 13; Oregon, 1; Pennsylvania, 13; Tennessee, 2; Texas, 3; Virginia, 2; Wisconsin, 4.

<sup>6</sup> Includes \$1,233,650, value of commodities, other than printing ink, made as secondary products by establishments classified in this industry, but does not include \$1,243,704, the value of printing ink made as a secondary product in other industries. The total production of printing ink, including that made by establishments engaged primarily in other lines of manufacture, was as follows: For 1933, 132,505,206 pounds, valued at \$19,700,555; quantity not reported, valued at \$6,430,803. 1931, 153,310,485 pounds, \$25,527,636; quantity not reported, \$6,802,140. 1929, quantity not reported, \$41,630,486.

<sup>7</sup> No data.

## OIL, CAKE, AND MEAL, COTTONSEED

**Description of the industry.**—This industry embraces establishments engaged primarily in the manufacture of products from cottonseed, but does not cover the activities of plants engaged in the further manufacture, from refined cottonseed oil, of lard substitutes and vegetable cooking oils. The statistics relate to the 12-month period from August 1 to July 31, which coincides with the production cycle of the industry.

**Extent of coverage.**—The 1933 coverage of the establishments reporting in this industry for 1931 was practically complete. Of the 504 such establishments, only 10 failed to supply any information in regard to their status (active, idle, etc.) or their activities in 1933, and these establishments accounted for less than 1 percent of the total number of wage earners and the total value of products reported for the industry for 1931.

**TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931**

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
<i>Thousands of dollars. (See sec. 25, p. 13)</i>								
<i>United States</i>								
1933.....	475	2,231	14,242	3,625	5,376	78,229	104,212	25,982
1931.....	504	( <sup>4</sup> )	12,268	( <sup>4</sup> )	8,335	147,165	181,347	34,182
1929.....	553	3,180	15,825	6,733	11,203	249,020	298,376	49,356
1927.....	547	3,172	18,434	6,714	14,259	220,038	276,338	56,300
<i>States</i>								
<i>Alabama:</i>								
1933.....	30	149	1,243	253	348	5,275	6,819	1,543
1931.....	33	( <sup>4</sup> )	981	( <sup>4</sup> )	622	11,471	14,084	2,614
<i>Arkansas:</i>								
1933.....	27	152	1,040	249	421	5,913	7,720	1,806
1931.....	26	( <sup>4</sup> )	713	( <sup>4</sup> )	449	7,404	8,908	1,605
<i>California:</i>								
1933.....	6	44	136	64	60	1,203	1,867	664
1931.....	7	( <sup>4</sup> )	213	( <sup>4</sup> )	318	3,821	5,696	1,876
<i>Georgia:</i>								
1933.....	53	218	1,294	334	411	7,133	8,963	1,829
1931.....	55	( <sup>4</sup> )	1,496	( <sup>4</sup> )	902	20,492	24,384	3,892
<i>Louisiana:</i>								
1933.....	19	96	588	166	211	3,519	4,416	897
1931.....	22	( <sup>4</sup> )	621	( <sup>4</sup> )	390	7,352	9,422	2,070
<i>Mississippi:</i>								
1933.....	46	242	1,728	443	619	8,643	11,750	3,107
1931.....	46	( <sup>4</sup> )	1,708	( <sup>4</sup> )	1,163	17,284	21,691	4,407
<i>North Carolina:</i>								
1933.....	41	176	974	266	323	4,325	6,163	1,838
1931.....	46	( <sup>4</sup> )	920	( <sup>4</sup> )	512	8,733	10,450	1,716
<i>Oklahoma:</i>								
1933.....	35	152	931	233	420	5,182	7,797	2,616
1931.....	40	( <sup>4</sup> )	574	( <sup>4</sup> )	363	6,869	8,985	2,116

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
Thousands of dollars. (See sec. 25, p. 13)								
States—Continued								
South Carolina:								
1933.....	32	125	860	207	258	4,092	5,191	1,009
1931.....	31	( <sup>4</sup> )	824	( <sup>4</sup> )	453	7,982	9,720	1,738
Tennessee:								
1933.....	15	119	1,067	215	498	5,978	8,152	2,174
1931.....	16	( <sup>4</sup> )	846	( <sup>4</sup> )	636	9,279	11,407	2,128
Texas:								
1933.....	162	699	4,078	1,108	1,692	24,925	32,742	7,817
1931.....	167	( <sup>4</sup> )	3,017	( <sup>4</sup> )	2,188	40,808	48,914	8,106
Other States: <sup>5</sup>								
1933.....	9	59	304	87	114	2,041	2,633	592
1931.....	15	( <sup>4</sup> )	355	( <sup>4</sup> )	340	5,669	7,685	2,016

<sup>1</sup> Not including proprietors and firm members, as follows: 1933, 17; 1931, no data; 1929, 34; 1927, 59.<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.<sup>3</sup> Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.<sup>4</sup> No data.<sup>5</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Arizona, 3; 5; Florida, 0, 1; Illinois, 3, 3; Kentucky, 0, 1; Missouri, 0, 1; New Mexico, 3, 4.

TABLE 2.—WAGE EARNERS, BY QUARTERS, FOR SELECTED STATES: 1933 AND 1931

[The average for the year (table 1) differs from the average of the quarterly figures below. (See fourth sentence, sec. 13, p. 8.) See sec. 26, p. 13]

	1933 <sup>1</sup>				1931			
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
United States.....	12,315	7,852	20,741	18,839	10,652	4,126	16,273	19,008
<i>States</i>								
Alabama.....	1,221	623	1,754	1,273	928	219	1,448	1,580
Arizona.....	68	24	86	146	126	33	177	219
Arkansas.....	839	613	1,703	1,075	490	210	1,054	1,230
California.....	100	28	103	300	228	149	168	206
Georgia.....	1,135	745	1,925	1,654	1,469	392	2,256	2,185
Illinois.....	208	62	145	252	99	17	72	175
Louisiana.....	517	309	1,156	631	1,098	201	304	822
Mississippi.....	1,578	1,190	2,603	2,211	1,220	611	2,518	2,637
New Mexico.....	28	5	37	132	52	16	82	80
North Carolina.....	1,039	335	1,105	1,495	956	209	848	1,615
Oklahoma.....	497	358	1,228	1,690	397	160	494	1,104
South Carolina.....	890	600	1,153	1,104	887	394	985	1,238
Tennessee.....	765	589	1,622	1,446	462	208	1,197	1,399
Texas.....	3,430	2,371	6,121	5,430	2,192	1,226	4,564	4,346

<sup>1</sup> See sec. 5, p. 4, and sec. 13, p. 8. The 452 establishments canvassed with the standard schedule reported wage earners, by months, as follows:

January.....	13,596	May.....	8,711	September.....	20,453
February.....	13,812	June.....	7,782	October.....	22,668
March.....	12,140	July.....	8,317	November.....	20,135
April.....	10,469	August.....	11,668	December.....	18,482

# PAINTS AND VARNISHES

[A preliminary report for this industry was issued on Nov. 5, 1934]

**Description of the industry.**—This industry designation is applied to establishments engaged primarily in the manufacture of pigments or colors (other than bone black, carbon black, and lampblack), paints in paste form, paints mixed ready for use, varnishes, lacquers, japans, enamels, fillers, stains, etc.

**Extent of coverage.**—The 1933 coverage of the establishments reporting in this industry for 1931 was practically complete. Of the 1,039 such establishments, 22 failed to supply any information in regard to their status (active, idle, etc.) or their activities in 1933, but these establishments accounted for less than 1 percent of the total number of wage earners and of the total value of products reported for the industry for 1931.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
<i>Thousands of dollars. (See sec. 25, p. 13)</i>								
<i>United States</i>								
1933.....	961	7,326	22,880	12,816	23,791	153,026	289,442	136,416
1931.....	1,039	( <sup>4</sup> )	22,521	( <sup>4</sup> )	29,425	193,737	350,726	156,989
1929.....	1,063	12,888	29,211	38,034	42,245	334,132	568,976	234,844
1927.....	1,006	12,634	28,061	33,310	40,185	307,724	519,010	211,285
<i>States</i>								
<i>California:</i>								
1933.....	84	321	1,130	581	1,261	9,016	16,405	7,389
1931.....	77	( <sup>4</sup> )	1,087	( <sup>4</sup> )	1,472	11,956	19,128	7,172
<i>Colorado:</i>								
1933.....	5	21	47	34	44	247	458	211
1931.....	5	( <sup>4</sup> )	47	( <sup>4</sup> )	62	338	630	291
<i>Connecticut:</i>								
1933.....	10	34	172	54	161	1,121	1,072	852
1931.....	11	( <sup>4</sup> )	168	( <sup>4</sup> )	207	1,394	2,612	1,218
<i>Florida:</i>								
1933.....	7	15	21	18	17	135	218	83
1931.....	5	( <sup>4</sup> )	13	( <sup>4</sup> )	16	96	146	49
<i>Georgia:</i>								
1933.....	12	32	94	57	60	408	729	322
1931.....	14	( <sup>4</sup> )	80	( <sup>4</sup> )	78	459	843	384
<i>Illinois:</i>								
1933.....	101	819	2,893	1,467	2,837	22,486	40,261	17,775
1931.....	108	( <sup>4</sup> )	2,724	( <sup>4</sup> )	3,607	29,852	50,431	20,579
<i>Indiana:</i>								
1933.....	21	179	498	326	525	3,145	5,473	2,328
1931.....	24	( <sup>4</sup> )	372	( <sup>4</sup> )	481	3,296	5,908	2,612
<i>Kentucky:</i>								
1933.....	21	164	412	271	390	3,161	7,493	4,332
1931.....	22	( <sup>4</sup> )	383	( <sup>4</sup> )	478	3,560	6,433	2,873
<i>Louisiana:</i>								
1933.....	9	53	133	69	124	872	1,601	729
1931.....	9	( <sup>4</sup> )	116	( <sup>4</sup> )	119	802	1,627	825
<i>Maryland:</i>								
1933.....	18	120	517	222	488	2,122	4,930	2,808
1931.....	21	( <sup>4</sup> )	472	( <sup>4</sup> )	593	2,522	5,079	2,557

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1,2</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
<i>Thousands of dollars. (See sec. 25, p. 13)</i>								
<i>States—Continued</i>								
Massachusetts:								
1933.....	42	225	616	313	664	4,512	8,921	4,409
1931.....	49	( <sup>4</sup> )	730	( <sup>4</sup> )	897	5,076	10,674	5,598
Michigan:								
1933.....	38	410	1,527	828	1,597	9,278	17,696	8,418
1931.....	43	( <sup>4</sup> )	1,331	( <sup>4</sup> )	1,930	13,703	25,447	11,744
Minnesota:								
1933.....	18	94	224	192	262	1,422	2,566	1,144
1931.....	19	( <sup>4</sup> )	228	( <sup>4</sup> )	284	1,762	3,167	1,395
Missouri:								
1933.....	44	570	1,328	881	1,380	8,334	17,814	9,480
1931.....	46	( <sup>4</sup> )	1,213	( <sup>4</sup> )	1,541	9,291	18,767	9,475
Nebraska:								
1933.....	4	8	29	9	20	70	172	102
1931.....	6	( <sup>4</sup> )	48	( <sup>4</sup> )	54	334	616	282
New Jersey:								
1933.....	96	933	3,564	1,794	3,871	24,606	46,110	21,504
1931.....	95	( <sup>4</sup> )	3,463	( <sup>4</sup> )	4,876	29,715	55,363	25,648
New York:								
1933.....	151	1,016	3,294	1,852	3,653	23,604	44,843	21,239
1931.....	178	( <sup>4</sup> )	3,456	( <sup>4</sup> )	4,691	29,000	54,714	25,714
Ohio:								
1933.....	91	889	2,245	1,397	2,352	13,348	26,056	13,608
1931.....	100	( <sup>4</sup> )	2,891	( <sup>4</sup> )	3,182	18,170	34,448	16,278
Oregon:								
1933.....	9	28	68	38	68	409	656	247
1931.....	9	( <sup>4</sup> )	75	( <sup>4</sup> )	89	549	821	272
Pennsylvania:								
1933.....	88	771	2,444	1,285	2,296	14,707	25,865	11,158
1931.....	98	( <sup>4</sup> )	2,463	( <sup>4</sup> )	2,868	18,141	32,366	14,225
Rhode Island:								
1933 <sup>4</sup> .....	7	57	95	112	105	804	1,462	663
Tennessee:								
1933.....	10	34	130	70	111	920	1,443	522
1931.....	12	( <sup>4</sup> )	113	( <sup>4</sup> )	121	831	1,335	504
Texas:								
1933.....	17	65	108	83	97	1,006	1,830	824
1931.....	22	( <sup>4</sup> )	260	( <sup>4</sup> )	234	1,459	2,483	1,024
Virginia:								
1933.....	7	21	81	46	60	321	613	293
1931.....	7	( <sup>4</sup> )	92	( <sup>4</sup> )	81	351	723	372
Washington:								
1933.....	8	10	53	41	67	302	561	260
1931.....	9	( <sup>4</sup> )	76	( <sup>4</sup> )	109	506	952	447
West Virginia:								
1933.....	6	63	185	157	194	909	1,453	544
1931.....	6	( <sup>4</sup> )	157	( <sup>4</sup> )	173	1,326	1,951	624
Wisconsin:								
1933.....	16	223	460	363	534	3,040	5,518	2,478
1931.....	16	( <sup>4</sup> )	475	( <sup>4</sup> )	625	5,687	7,415	1,727
Other States: <sup>5</sup>								
1933.....	21	142	513	253	549	2,723	5,423	2,700
1931.....	28	( <sup>4</sup> )	488	( <sup>4</sup> )	570	3,561	6,660	3,099

<sup>1</sup> Not including proprietors and firm members, as follows: 1933, 174; 1931, no data; 1929, 234; 1927, 258.<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.<sup>3</sup> Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.<sup>4</sup> No data.<sup>5</sup> Figures for 1931 withheld to avoid disclosing approximations of data for individual establishments; included in figures for "Other States."<sup>6</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Ala., 2; Del., 2; 2; Iowa, 3; 4; Kans., 2; 1; Maine, 1; 1; Miss., 0; 1; Mont., 1; 0; N. C., 3; 3; Okla., 3; 2; R. I. (1931), 5; S. C., 3; 3; Utah, 1; 3.

TABLE 2.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, 1933 AND 1931, AND BY KIND AND QUANTITY, 1929, FOR THE UNITED STATES

	1933	1931 Comparable with 1933 <sup>1</sup>	1931 As published
1. "Paints and varnishes" industry, all products, total value.	\$289,441,956	-----	\$350,725,652
2. Paints, varnishes, and related products.	268,103,677	\$322,774,897	334,112,813
3. Other products (not normally belonging to the industry).	11,708,787	15,901,118	16,612,839
4. Paints and varnishes and other products, not reported separately (on abbreviated schedule) <sup>2</sup> .	9,629,492	-----	-----
5. Paints, varnishes, and related products made as secondary products in other industries, value.	19,224,885	27,951,198	27,951,198
6. Paints, varnishes, and related products, aggregate value (2 and 5).	287,328,562	350,726,095	362,064,011

  

	QUANTITY <sup>3</sup>				VALUE IN THOUSANDS OF DOLLARS <sup>4</sup>	
	1933	1931	1931	1929	1933	1931
	Reported on standard schedule <sup>1</sup>	Comparable with 1933 <sup>1</sup>	As published; comparable with 1929		Reported on standard schedule <sup>1</sup>	Comparable with 1933 <sup>1</sup>
Paints, varnishes, and related products, aggregate value.					287,329	350,726
Pigments (colors) made for sale, total.	M lb. 1,210,523	M lb. 1,279,519	M lb. 1,296,096	M lb. 1,913,459	62,177	68,992
White lead, dry, total production.	170,064	221,177	221,177	330,118	-----	-----
Made and consumed in the same establishments.	68,375	96,005	96,005	179,753	-----	-----
For sale.	101,679	125,171	125,171	150,365	4,922	6,899
Lead oxides, total production.	171,136	168,617	168,617	267,852	-----	-----
Made and consumed in the same establishments.	6,158	3,681	3,681	5,782	-----	-----
For sale:						
Litharge.	114,778	119,350	119,350	163,736	5,517	6,202
Other lead oxides.	50,200	45,586	45,586	98,333	2,891	2,829
Zinc oxide.	246,663	239,756	239,756	436,715	12,142	14,307
Lithopone.	273,306	307,489	307,489	410,639	11,696	12,927
Iron oxides.	61,954	60,606	64,212	105,627	2,069	1,830
Chrome yellow, orange, and green.	37,400	38,752	38,752	42,706	5,732	5,850
Other fine colors.	12,099	14,381	14,536	22,608	5,445	5,289
Other dry colors.	304,859	318,326	330,690	472,118	11,046	11,847
Pulp colors, sold moist.	7,590	10,102	10,464	15,613	717	1,011
Paints, total value.	-----	-----	-----	-----	111,797	147,557
In paste form, total.	184,424	236,076	242,528	401,546	16,946	25,402
White lead in oil.	111,845	138,716	139,106	232,938	8,511	13,017
Colors in oil.	19,959	22,784	23,837	33,195	3,447	4,508
Other paints in paste form.	52,620	74,576	79,585	135,413	4,988	7,877
Mixed, ready for use, total.	M gal. 63,825	M gal. 74,612	M gal. 78,249	M gal. 106,165	90,289	115,783
Paints in oil.	41,346	35,749	37,710	53,054	61,904	60,188
Other ready-mixed and semi-paste paints.	22,479	38,863	40,539	53,111	28,385	55,595
Water paints and calcimines, dry and in paste form.	M lb. 100,443	M lb. 117,390	M lb. 122,823	M lb. 155,811	3,947	5,015
Plastic paints.	10,258	14,135	14,561	( <sup>5</sup> )	615	1,356
Varnishes, japans, and lacquers (including enamels), total value.	-----	-----	-----	-----	106,439	121,584
Oleoresinous varnishes.	M gal. 24,730	M gal. 25,988	M gal. 27,074	M gal. 38,843	25,627	28,932
Spirit varnishes, not turpentine.	5,093	5,531	5,888	7,380	5,062	6,903
Varnishes other than oleoresinous and spirit.	4,687	5,131	5,396	8,476	4,699	5,715
Pyroxylin products:						
Clear lacquers.	6,953	7,872	8,097	9,939	9,637	12,501
Lacquer enamels.	7,423	8,492	8,705	15,161	15,518	20,315
Other pyroxylin products (thinners, etc.), value.	-----	-----	-----	-----	7,463	13,194
Drying japans and driers.	2,107	2,372	2,481	5,188	1,645	1,974
Baking japans.	2,230	2,314	2,389	4,039	1,570	1,748
Enamels, oil and varnish base.	17,879	15,122	15,478	19,987	32,789	29,117
Other products of the varnish group.	-----	-----	-----	-----	2,430	1,184

For footnotes, see end of table.

TABLE 2.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, 1933 AND 1931, AND BY KIND AND QUANTITY, 1929, FOR THE UNITED STATES—Continued

	QUANTITY <sup>1</sup>				VALUE IN THOUSANDS OF DOLLARS <sup>2</sup>	
	1933	1931	1931	1929	1933	1931
	Re- ported on standard sched- ule <sup>3</sup>	Com- parable with 1933 <sup>1</sup>	As pub- lished; compar- able with 1929		Re- ported on standard sched- ule <sup>2</sup>	Com- parable with 1933 <sup>1</sup>
Paints, varnishes, and related products—Continued.						
Varnishes, japs, lacquers, etc.—Con.	<i>M gal.</i>	<i>M gal.</i>	<i>M gal.</i>	<i>M gal.</i>		
Varnish stains.....	1, 948	1, 658	1, 726	2, 160	2, 439	2, 461
Other stains.....						3, 957
Fillers (liquid, paste, and dry).....					862	1, 123
Putty.....	<i>M lb.</i>	<i>M lb.</i>	<i>M lb.</i>	<i>M lb.</i>		
Bleached shellac.....	47, 369	56, 323	69, 907	99, 163	1, 738	2, 434
	11, 156	10, 731	10, 731	11, 140	1, 878	2, 619

<sup>1</sup> See sec. 5c, p. 4. The figures given in this column represent the production, in 1931, of those *classes* of establishments (not in all cases the same individual establishments) which reported on the standard schedule for 1933.

<sup>2</sup> See sec. 5c, p. 4.

<sup>3</sup> See sec. 25, p. 13.

<sup>4</sup> Not reported separately.

TABLE 3.—WAGE EARNERS, BY QUARTERS, FOR SELECTED STATES: 1933 AND 1931

[The average for the year, as given in table 1, differs from the average for the 4 months for which figures are given below. (See fourth sentence, sec. 13, p. 8.) See sec. 26, p. 13]

	1933 <sup>1</sup>				1931			
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
United States.....	19, 714	24, 012	24, 781	24, 183	23, 089	23, 911	21, 876	21, 227
States.....								
California.....	1, 020	1, 137	1, 237	1, 154	1, 104	1, 132	1, 095	1, 013
Colorado.....	40	58	51	40	46	50	47	45
Connecticut.....	158	169	176	182	180	168	165	161
Florida.....	17	20	26	25	13	13	13	13
Georgia.....	73	89	117	108	82	80	82	75
Illinois.....	2, 466	3, 207	3, 141	2, 952	2, 871	2, 950	2, 563	2, 516
Indiana.....	447	516	541	527	376	384	351	361
Iowa.....	8	9	9	8	26	26	26	26
Kentucky.....	342	455	450	427	386	397	384	362
Louisiana.....	101	165	154	122	115	124	112	116
Maryland.....	448	520	509	587	595	594	309	413
Massachusetts.....	552	665	640	627	718	789	729	713
Michigan.....	1, 314	1, 701	1, 589	1, 523	1, 339	1, 499	1, 274	1, 314
Minnesota.....	204	239	236	234	226	258	220	216
Missouri.....	1, 114	1, 403	1, 436	1, 408	1, 221	1, 349	1, 159	1, 142
Nebraska.....	43	27	30	24	44	48	61	57
New Jersey.....	3, 041	3, 596	3, 976	3, 958	3, 570	3, 572	3, 427	3, 240
New York.....	2, 826	3, 353	3, 584	3, 600	3, 472	3, 537	3, 439	3, 362
North Carolina.....	21	22	27	26	23	25	23	22
Ohio.....	1, 838	2, 413	2, 427	2, 288	2, 481	2, 536	2, 307	2, 194
Oklahoma.....	15	24	21	20	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Oregon.....	63	74	74	67	75	77	74	70
Pennsylvania.....	2, 140	2, 576	2, 698	2, 534	2, 470	2, 616	2, 425	2, 342
Rhode Island.....	92	95	98	96	119	118	115	97
South Carolina.....	17	21	25	22	22	23	23	23
Tennessee.....	112	139	144	138	116	119	112	104
Texas.....	98	114	115	105	277	267	253	231
Virginia.....	49	74	125	84	77	96	106	76
Washington.....	49	54	54	60	78	78	73	63
West Virginia.....	162	168	210	212	156	154	156	150
Wisconsin.....	441	473	474	477	477	517	464	460

<sup>1</sup> See secs. 5, p. 4, and 13, p. 8. The 648 establishments canvassed with the standard schedule reported wage earners, by months, as follows:

January.....	18, 894	May.....	21, 565	September.....	23, 557
February.....	19, 043	June.....	22, 826	October.....	23, 631
March.....	18, 682	July.....	23, 247	November.....	22, 983
April.....	19, 867	August.....	23, 542	December.....	23, 071

<sup>2</sup> Withheld to avoid disclosing data for individual establishments.

## RAYON AND ALLIED PRODUCTS

[A preliminary report for this industry was issued on Oct. 1, 1934]

**Description of the industry.**—This industry, as defined for Census purposes, embraces establishments engaged primarily in the manufacture of such regenerated cellulose and cellulose-acetate products as rayon and other synthetic fibers, transparent wrapping tissue, etc. It does not cover the manufacture of textile fabrics from rayon, establishments engaged primarily in this line of manufacture being assigned to the "Silk and rayon goods" industry.

**Extent of coverage.**—All the establishments in this industry that reported at the census for 1931 were accounted for in the canvass for 1933.

**TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931**

[See sec. 26; p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>1</sup>	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manu- facture <sup>2</sup>
Thousands of dollars. (See sec. 25, p. 13)								
United States								
1933.....	34	2,395	44,306	5,095	38,613	44,031	156,932	112,900
1931.....	32	( <sup>3</sup> )	38,735	( <sup>3</sup> )	38,231	36,181	132,632	96,452
1929.....	29	2,278	39,106	5,709	44,697	33,335	149,546	116,211
1927.....	19	1,355	26,341	3,994	28,649	25,748	109,888	84,141
States								
Virginia:								
1933.....	7	524	11,018	1,003	9,469	10,420	36,981	26,560
1931.....	6	( <sup>3</sup> )	10,567	( <sup>3</sup> )	9,954	8,485	30,646	22,161
Other States: <sup>4</sup>								
1933.....	27	1,871	33,288	4,092	29,143	33,611	119,951	86,340
1931.....	26	( <sup>3</sup> )	28,168	( <sup>3</sup> )	28,278	27,696	101,987	74,291

<sup>1</sup> The figures for 1933 do not include data for number or compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative officers are included in the figures for any year.

<sup>2</sup> Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.

<sup>3</sup> No data.

<sup>4</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Connecticut, 1, 1; Delaware, 1, 1; Georgia, 1, 1; Illinois, 1, 1; Maryland, 1, 1; Massachusetts, 2, 1; New Hampshire, 1, 1; New Jersey, 1, 1; New York, 4, 4; North Carolina, 1, 1; Ohio, 2, 2; Pennsylvania, 3, 3; Rhode Island, 1, 1; Tennessee, 5, 5; West Virginia, 1, 1; Wisconsin, 1, 1.



TABLE 2.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929

	QUANTITY IN THOUSANDS OF POUNDS <sup>1</sup>			VALUE IN THOUSANDS OF DOLLARS <sup>1</sup>		
	1933	1931	1929	1933	1931	1929
Rayon and allied products.....				156,932	132,632	149,546
Yarns, total.....	213,498	150,879	116,632	129,202	112,282	140,847
Finer than 125 denier.....	61,166	32,959	12,814	46,685	30,525	21,177
125 to 150 denier.....	129,539	100,023	85,529	71,588	70,725	101,495
Heavier than 150 denier.....	22,794	17,897	18,290	10,930	11,032	18,175
Allied products (transparent sheets, waste, etc.), value.....				27,729	20,350	8,700

<sup>1</sup> See sec. 25, p. 13.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR SELECTED STATES: 1933 AND 1931

[ For average for the year, see table 1. The month of maximum employment is indicated by **bold-faced** figures and that of minimum employment by *italic* figures. See sec. 26, p. 13]

	NUMBER REPORTED FOR—											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<i>United States</i>												
1933.....	39,688	39,242	37,472	<b>36,761</b>	39,069	41,475	46,101	50,543	<b>50,779</b>	50,672	50,400	<b>49,474</b>
1931.....	<i>37,408</i>	37,413	38,152	38,622	39,014	39,712	39,907	<b>39,998</b>	39,475	39,036	38,180	<b>37,899</b>
<i>States</i>												
Tennessee:												
1933.....	6,533	6,709	6,592	<i>6,448</i>	6,875	7,123	7,754	<b>8,194</b>	8,142	8,029	8,001	7,989
1931.....	<i>6,686</i>	5,731	6,172	6,531	7,114	7,441	7,401	<b>7,541</b>	6,539	6,764	6,705	<b>6,934</b>
Virginia:												
1933.....	10,240	10,289	9,857	<i>9,867</i>	10,075	10,556	10,997	12,144	<b>12,387</b>	12,235	12,134	<b>12,037</b>
1931.....	10,243	10,407	10,611	10,706	10,719	10,571	10,709	10,651	10,722	<b>10,744</b>	10,512	<i>10,215</i>

# SOAP

[A preliminary report for this industry was issued on July 23, 1934]

**Description of the industry.**—This industry classification covers establishments engaged primarily in the manufacture of soap and soap products. The soap departments of large meat-packing plants are also included. The principal products are toilet soap, white and yellow laundry soap, soap chips, and other hard soaps; granulated and powdered soaps and soap powders; shaving soap, cream, and powder; and soft, liquid, and paste soaps.

**Extent of coverage.**—The 1933 coverage of the establishments reporting in this industry for 1931 was practically complete. Of the 248 such establishments, only 6 failed to supply any information in regard to their status (active, idle, etc.) or their activities in 1933, but these establishments accounted for only a small fraction of 1 percent of the total number of wage earners and of the total value of products reported for the industry for 1931.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees	Number of wage earners (average for the year)	Salaries	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture
Thousands of dollars. (See sec. 25, p. 13)								
<i>United States</i>								
1933.....	235	3,524	14,304	6,311	14,140	93,507	200,128	106,621
1931.....	248	(*)	14,163	(*)	17,740	121,829	257,719	135,889
1929.....	282	4,688	14,363	11,504	18,995	180,353	310,192	129,839
1927.....	256	4,159	13,432	9,766	19,716	172,244	287,060	114,816
<i>States</i>								
<i>California:</i>								
1933.....	32	209	895	399	934	6,277	13,243	6,967
1931.....	28	(*)	736	(*)	906	7,726	16,910	9,184
<i>Illinois:</i>								
1933.....	23	275	1,906	455	1,869	12,658	19,300	6,641
1931.....	28	(*)	1,697	(*)	2,053	11,910	19,555	7,645
<i>Indiana:</i>								
1933.....	7	163	992	328	968	7,281	25,173	17,892
1931.....	7	(*)	959	(*)	1,137	7,857	24,309	16,452
<i>Minnesota:</i>								
1933.....	7	27	54	53	54	279	493	214
1931.....	7	(*)	45	(*)	48	310	827	516
<i>Missouri:</i>								
1933.....	8	72	304	137	301	2,373	3,901	1,527
1931.....	9	(*)	338	(*)	378	3,127	5,273	2,146
<i>New York:</i>								
1933.....	35	365	1,412	829	1,499	11,039	18,102	7,062
1931.....	39	(*)	1,822	(*)	2,486	16,759	28,683	12,124
<i>Ohio:</i>								
1933.....	17	469	2,538	765	2,403	14,384	22,760	8,375
1931.....	17	(*)	2,294	(*)	2,794	18,773	30,066	11,293

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
Thousands of dollars. (See sec. 25, p. 13)								
States—Continued								
Pennsylvania:								
1933.....	25	140	677	303	608	3,263	8,088	4,825
1931.....	27	( <sup>4</sup> )	682	( <sup>4</sup> )	831	6,100	13,271	7,171
Rhode Island:								
1933.....	5	12	30	30	31	265	393	128
1931.....	6	( <sup>4</sup> )	27	( <sup>4</sup> )	42	358	524	166
Texas:								
1933 <sup>5</sup> .....	3	8	13	3	7	54	79	25
Washington:								
1933.....	4	10	40	15	45	169	274	106
1931.....	4	( <sup>4</sup> )	33	( <sup>4</sup> )	43	201	313	113
Other States: <sup>6</sup>								
1933.....	69	1,779	5,443	2,964	5,421	35,466	88,323	52,858
1931.....	76	( <sup>4</sup> )	5,530	( <sup>4</sup> )	7,020	48,710	117,790	69,080

<sup>1</sup> Not including proprietors and firm members, as follows: 1933, 58; 1931, no data; 1929, 86; 1927, 90.<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.<sup>3</sup> Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.<sup>4</sup> No data.<sup>5</sup> Figures for 1931 included in those for "Other States" to avoid disclosing data for individual establishments.<sup>6</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Alabama, 1, 1; Colorado, 2, 2; Connecticut, 3, 4; Florida, 0, 1; Georgia, 1, 1; Iowa, 3, 3; Kansas, 3, 3; Kentucky, 1, 1; Louisiana, 4, 1; Maryland, 3, 2; Massachusetts, 15, 24; Michigan, 2, 1; Nebraska, 1, 1; Nevada, 1, 0; New Jersey, 15, 16; North Carolina, 1, 1; Oklahoma, 1, 0; Oregon, 1, 2; Tennessee, 2, 1; Texas (1931), 2; Utah, 1, 1; Virginia, 0, 1; Wisconsin, 8, 7.

TABLE 2.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, 1933 AND 1931, AND BY KIND AND QUANTITY, 1929, FOR THE UNITED STATES

	1933	1931 Comparable with 1933 <sup>1</sup>	1931 As published
1. Soap industry, all products, total value.....	\$200,127,929	-----	\$257,718,699
2. Soap.....	165,359,061	\$214,343,419	228,330,828
3. Other products (not normally belonging to the industry).....	22,817,540	27,495,746	29,387,871
4. Soap and other products, not reported separately (on abbreviated schedule) <sup>2</sup> .....	11,951,328	-----	-----
5. Soap made as a secondary product in other industries.....	7,951,468	9,731,294	9,731,294
6. Soap, total value (2 and 5).....	173,310,529	224,574,713	238,062,122

For footnotes, see end of table.

TABLE 2.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, 1933 AND 1931, AND BY KIND AND QUANTITY, 1929, FOR THE UNITED STATES—Continued

	Thousands of pounds <sup>1</sup>				Value in thousands of dollars <sup>2</sup>	
	1933 Reported on standard schedule <sup>3</sup>	1931 Compar- able with 1933 <sup>4</sup>	1931 As pub- lished; compar- able with 1929	1929	1933 Reported on standard schedule <sup>3</sup>	1931 Compar- able with 1933 <sup>4</sup>
Soap, aggregate value.....					173,311	224,575
Hard soaps, total.....	2,362,690	2,464,249	2,572,895	2,587,955	146,001	189,473
Toilet soap.....	315,373	298,984	305,688	324,384	44,087	52,164
Foods soap.....	3,017	4,103	20,015	21,829	172	227
Soap chips and flakes.....	399,256	327,198	351,077	387,925	24,925	23,710
Laundry soap (in bar form), white and yellow.....	1,257,689	1,404,274	1,431,104	1,465,183	44,495	66,939
Granulated and powdered soap.....	369,915	404,453	421,804	337,291	31,428	39,522
Other hard soaps.....	17,441	25,237	43,257	51,343	894	1,911
Soap powder or washing powder.....	200,175	237,387	262,711	505,529	6,427	10,875
Cleansers and scouring powders containing soap.....	165,774	158,344	164,067			
Paste soap.....	6,489	10,952	31,623	40,526	315	545
Shaving soap, cream, and powder, total.....					9,293	11,128
Quantity reported.....	10,305	9,715	10,453	11,094	5,363	6,600
Quantity not reported.....					3,929	4,528
Soap stock or soap base, made for sale.....	24,267	7,585	8,978	4,106	685	451
Other soap and that not reported by kind.....	60,834	82,077	118,259	157,362	4,712	6,081

<sup>1</sup> See sec. 5c, p. 4. The figures given in this column represent the production, in 1931, of those *classes* of establishments (not in all cases the same individual establishments) which reported on the standard schedule for 1933.

<sup>2</sup> See sec. 5c, p. 4.

<sup>3</sup> See sec. 25, p. 13.

<sup>4</sup> Values combined to avoid disclosing approximations of output reported by manufacturers of shaving soap.

TABLE 3.—WAGE EARNERS, BY QUARTERS, FOR SELECTED STATES: 1933 AND 1931

The average for the year (table 1) differs from the average of the quarterly figures below. (See fourth sentence, sec. 13, p. 8.) See sec. 26, p. 13]

	1933 <sup>1</sup>				1931			
	March	June	Sep- tember	Decem- ber	March	June	Sep- tember	Decem- ber
United States.....	12,993	13,998	16,222	14,619	14,374	13,792	14,327	14,121
<i>States</i>								
California.....	835	932	938	896	720	692	734	865
Connecticut.....	133	174	197	154	174	174	190	164
Illinois.....	1,578	1,809	2,409	2,044	1,724	1,652	1,774	1,662
Indiana.....	984	956	1,031	1,037	989	942	938	951
Iowa.....	212	273	375	290	225	227	229	221
Kansas.....	683	722	819	714	821	812	807	793
Louisiana.....	52	43	76	63	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Maryland.....	286	354	427	343	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Massachusetts.....	1,129	1,126	1,283	1,223	1,435	1,338	1,339	1,314
Minnesota.....	57	56	52	49	41	48	46	46
Missouri.....	275	310	379	281	346	339	329	320
New Jersey.....	2,126	2,051	2,489	2,293	2,203	2,028	2,190	2,165
New York.....	1,350	1,377	1,549	1,423	1,863	1,770	1,804	1,823
Ohio.....	2,184	2,583	2,901	2,605	2,238	2,271	2,354	2,294
Pennsylvania.....	693	697	679	648	704	672	676	666
Rhode Island.....	31	29	33	30	27	27	27	26
Texas.....	12	10	15	17	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Washington.....	35	38	43	44	33	32	34	29
Wisconsin.....	276	259	319	275	803	282	319	286

<sup>1</sup> See secs. 5, p. 4, and 13, p. 8. The 99 establishments canvassed with the standard schedule reported wage earners, by months, as follows:

January.....	11,802	May.....	12,146	September.....	14,844
February.....	11,955	June.....	12,727	October.....	14,910
March.....	11,840	July.....	12,960	November.....	13,838
April.....	11,889	August.....	14,198	December.....	13,363

<sup>2</sup> Withheld to avoid disclosing data for individual establishments.

# TANNING MATERIALS, NATURAL DYESTUFFS, MORDANTS AND ASSISTANTS, AND SIZES

[A preliminary report for this industry was issued on Oct. 15, 1934]

**Description of the industry.**—This industry embraces establishments engaged primarily in the manufacture of tanning extracts and solutions, natural dyestuffs, mordants and assistants, and sizes. Natural dyestuffs are made from woods, barks, leaves, berries, and other forest and vegetable products. (Artificial or synthetic dyes are products of the "Chemicals not elsewhere classified" industry.)

**Extent of coverage.**—The 1933 coverage of the establishments reporting in this industry for 1931 was practically complete. Of the 116 such establishments, only 3 failed to supply any information in regard to their status (active, idle, etc.) or their activities in 1933, and these establishments accounted for less than one-half of 1 per cent of the total number of wage earners and of the total value of products reported for this industry for 1931.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
Thousands of dollars. (See sec. 25, p. 13)								
<i>United States</i>								
1933.....	124	498	2,141	1,121	2,212	13,518	23,322	9,804
1931.....	116	( <sup>4</sup> )	1,962	( <sup>4</sup> )	2,390	15,521	26,469	10,948
1929.....	126	709	2,419	2,806	3,114	25,336	39,886	14,500
1927.....	122	807	2,414	2,518	2,971	23,074	35,677	12,603
<i>States</i>								
<i>Georgia:</i>								
1933.....	3	10	49	24	30	265	504	239
<i>Massachusetts:</i>								
1933.....	23	69	164	166	190	1,593	2,734	1,141
1931.....	17	( <sup>4</sup> )	145	( <sup>4</sup> )	206	1,392	2,279	887
<i>New Jersey:</i>								
1933.....	24	131	517	337	732	4,903	7,612	2,709
1931.....	23	( <sup>4</sup> )	443	( <sup>4</sup> )	704	5,222	9,124	3,902
<i>New York:</i>								
1933.....	10	36	149	72	186	1,032	2,213	1,150
1931.....	10	( <sup>4</sup> )	151	( <sup>4</sup> )	218	1,463	2,599	1,136
<i>North Carolina:</i>								
1933.....	5	15	162	22	95	443	772	329
1931.....	6	( <sup>4</sup> )	155	( <sup>4</sup> )	115	523	869	342
<i>Pennsylvania:</i>								
1933.....	17	105	240	231	300	1,354	2,578	1,223
1931.....	17	( <sup>4</sup> )	234	( <sup>4</sup> )	293	1,817	3,128	1,311
<i>Rhode Island:</i>								
1933.....	10	28	57	55	72	626	1,010	384
1931.....	11	( <sup>4</sup> )	62	( <sup>4</sup> )	92	613	1,137	525
<i>South Carolina:</i>								
1933.....	3	6	5	10	4	28	56	28
<i>Virginia:</i>								
1933.....	7	14	208	29	138	600	971	370
1931.....	7	( <sup>4</sup> )	196	( <sup>4</sup> )	177	857	1,256	399
<i>Other States:<sup>5</sup></i>								
1933.....	22	84	590	176	466	2,673	4,873	2,200
1931.....	25	( <sup>4</sup> )	576	( <sup>4</sup> )	586	3,628	6,076	2,448

<sup>1</sup> Not including proprietors and firm members, as follows: 1933, 20; 1931, no data; 1929, 34; 1927, 28.

<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.

<sup>3</sup> Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.

<sup>4</sup> No data.

<sup>5</sup> Figures for 1931 included in those for "Other States" to avoid disclosing, exactly or approximately, any data for individual establishments.

<sup>6</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Ala., 2, 2; Calif., 2, 1; Conn., 1, 1; Del., 1, 1; Fla., 3, 1; Ga. (1931), 3; Ill., 2, 2; La., 2, 1; Md., 1, 1; Mich., 2, 2; Oreg., 1, 1; S. C. (1931), 2; Tenn., 4, 6; Wis., 1, 1.

TABLE 2.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, 1933 AND 1931, AND BY KIND AND QUANTITY, 1929, FOR THE UNITED STATES

	1933	1931 Comparable with 1933 <sup>1</sup>	1931 As published
1. "Tanning materials and dyestuffs" industry, all products, total value.....	\$23,322,328	-----	\$28,469,119
2. Tanning materials, natural dyestuffs, mordants, and assistants, and sizes.....	18,806,308	\$21,435,171	22,334,694
3. Other products (not normally belonging to the industry).....	3,574,938	4,091,835	4,134,425
4. Tanning materials, natural dyestuffs, mordants, and assistants, sizes, and other products, not reported separately (on abbreviated schedule) <sup>2</sup> .....	941,082	-----	-----
5. Tanning materials, natural dyestuffs, etc., made as secondary products in other industries, value.....	2,251,641	1,559,286	1,756,121
Tanning materials, natural dyestuffs, mordants and assistants, and sizes, aggregate value (2 and 5).....	21,057,949	22,994,457	24,090,815

  

	THOUSANDS OF POUNDS <sup>3</sup>				VALUE IN THOUSANDS OF DOLLARS <sup>3</sup>	
	1933	1931	1931	1929	1933	1931
	Reported on standard schedule <sup>1</sup>	Comparable with 1933 <sup>1</sup>	As published; comparable with 1929		Reported on standard schedule <sup>2</sup>	Comparable with 1933 <sup>1</sup>
Tanning materials, natural dyestuffs, mordants and assistants, and sizes, aggregate.....	-----	-----	-----	-----	21,058	22,994
Tanning materials, total <sup>4</sup> .....	-----	-----	-----	-----	7,017	8,093
Extracts:						
Chestnut <sup>5</sup> .....	236,065	229,276	<sup>6</sup> 229,276	270,162	3,517	<sup>6</sup> 3,644
Myrobalans <sup>5</sup> .....	788	2,269	2,266	( <sup>7</sup> )	25	66
Oak <sup>5</sup> .....	4,950	4,505	5,123	7,287	124	139
Quebracho <sup>5</sup> .....	33,709	75,747	76,469	100,067	763	1,834
Sumac <sup>5</sup> .....	6,462	5,809	5,809	5,279	301	370
Other extracts.....	-----	-----	-----	-----	503	<sup>6</sup> 279
Other tanning materials.....	-----	-----	-----	-----	1,733	1,761
Natural dyestuffs, total.....	-----	-----	-----	-----	1,133	1,616
Logwood extract <sup>5</sup> .....	10,827	17,030	17,032	19,338	870	1,250
Quercitron extract <sup>5</sup> .....	1,453	1,438	1,438	2,420	68	63
Other extracts and ground, chipped, and dry product.....	-----	-----	-----	-----	195	302
Mordants, total.....	-----	-----	-----	-----	459	449
Tannic acid <sup>5</sup> .....	682	667	<sup>6</sup> 667	1,449	236	<sup>6</sup> 251
Other.....	-----	-----	-----	-----	222	198
Assistants, total.....	-----	-----	-----	-----	6,216	5,187
Softeners, total <sup>4</sup> .....	-----	-----	-----	-----	1,509	1,639
Quantity reported.....	22,958	26,526	33,111	31,613	1,273	1,639
Quantity not reported.....	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	236	( <sup>7</sup> )
Turkey-red oil, total <sup>5</sup> .....	-----	-----	-----	-----	1,839	1,238
Quantity reported.....	17,573	12,999	13,550	24,261	1,726	1,238
Quantity not reported.....	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	113	( <sup>7</sup> )
Other.....	-----	-----	-----	-----	2,868	2,310
Sizes, total.....	-----	-----	-----	-----	6,233	7,650
Dextrin <sup>5</sup> .....	24,174	25,106	25,164	33,507	1,443	1,444
Other sizes, total.....	-----	-----	-----	-----	4,785	6,206
Quantity reported.....	162,776	190,772	195,814	263,788	4,600	6,206
Quantity not reported.....	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	185	( <sup>7</sup> )

<sup>1</sup> See sec. 5c, p. 4. The figures given in this column represent the production, in 1931, of those classes of establishments (not in all cases the same individual establishments) which reported on the standard schedule for 1933. <sup>2</sup> See sec. 5c, p. 4. <sup>3</sup> See sec. 25, p. 13.

<sup>4</sup> Not including tanning materials made and consumed in the same establishments.

<sup>5</sup> Number of establishments reporting: chestnut, 15; myrobalans, 4; oak, 5; quebracho, 5; sumac, 7; logwood, 8; quercitron, 3; tannic acid, 5; softeners, 30; Turkey-red oil, 22; dextrin sizes 8. <sup>6</sup> Revised.

<sup>7</sup> Withheld to avoid disclosing approximations of the output of individual establishments. <sup>8</sup> No data.

## Group 7.—PRODUCTS OF PETROLEUM AND COAL

### THE GROUP AS A WHOLE

[See p. 39]

This group comprises five industries, namely: Coke-oven products; Fuel briquettes; Gas, manufactured, illuminating and heating; Lubricating oils and greases, not made in petroleum refineries; and Petroleum refining.

#### SUMMARY FOR GROUP 7.—PRODUCTS OF PETROLEUM AND COAL: 1927 TO 1933

INDUSTRY	Cen- sus year	Num- ber of estab- lish- ments	Wage earners (aver- age for the year)	Wages	Cost of materials, containers, fuel and purchased electric energy	Value of products	Value added by manu- facture <sup>1</sup>
Total for the group-----	1933	1, 211	110, 453	\$144, 648, 744	\$1,285,560,676	\$1,871,493,835	\$585,933,159
	1931	1, 317	120, 146	182,367,608	1,551,733,861	2,264,817,027	713,083,166
	1929	1, 497	147, 216	229,050,010	2,546,840,193	3,647,747,957	1,100,907,764
	1927	1, 418	141, 655	217,485,282	2,262,698,554	3,060,225,609	797,527,145
Coke-oven products-----	1933	97	13, 066	15,526,645	123,275,080	165,731,226	42,456,146
	1931	112	14,383	22,134,487	162,703,117	226,509,038	63,715,921
	1929	153	20,552	33,389,425	281,592,430	416,348,458	134,756,028
	1927	171	21,082	34,167,692	286,728,701	382,012,617	95,283,916
Fuel briquettes-----	1933	24	296	261,590	1,885,567	2,943,799	1,058,232
	1931	23	301	356,633	3,034,691	4,567,853	1,533,162
	1929	23	426	584,029	5,918,799	9,497,657	3,578,858
	1927	20	274	445,511	4,873,195	7,203,410	2,330,215
Gas, manufactured, illumi- nating and heating.	1933	543	26,250	36,980,100	79,188,680	295,480,357	216,291,677
	1931	638	34,523	49,442,399	152,579,762	467,751,449	315,171,687
	1929	754	43,065	61,322,007	188,416,183	512,652,595	324,236,412
	1927	828	48,497	68,356,448	211,785,523	516,705,170	304,919,647
Lubricating oils and greases, not made in petroleum re- fineries. <sup>3</sup>	1933	158	1,794	2,086,928	16,773,979	28,701,505	11,927,526
	1931	168	2,115	2,959,972	22,808,976	41,703,690	18,894,714
	1929	177	2,577	3,738,637	39,571,373	69,584,246	30,012,873
Petroleum refining-----	1933	389	69,047	89,793,481	1,064,437,370	1,378,636,948	314,199,578
	1931	376	68,824	107,474,117	1,210,517,315	1,524,284,997	313,767,682
	1929	390	80,596	131,176,993	2,031,341,408	2,639,665,001	608,323,593
	1927	354	71,234	113,716,705	1,752,997,043	2,142,648,503	389,651,460

<sup>1</sup> Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.

<sup>2</sup> Revised; revision not carried into group total.

<sup>3</sup> Because of the transfer, at the census for 1929, of establishments engaged primarily in the manufacture of lubricating oils from the "Oils not elsewhere classified" industry, Group 8, to the "Lubricating oils and greases, not made in petroleum refineries" industry, Group 7, the figures for the latter industry for 1927 are not comparable with those for later years and therefore are not presented separately in this table. They are, however, included in the totals for the group.

## COKE-OVEN PRODUCTS

[A preliminary report for this industry was issued on Aug. 28, 1934]

**Description of the industry.**—This industry designation covers establishments engaged primarily in the manufacture of coke by the distillation of coal either in (A) "beehive" ovens or in (B) "by-product" ovens. The volatile constituents of the coal escape from the former class of ovens and are wasted, but are retained by the latter. Establishments which, although they operate coke ovens, are engaged primarily in the production and distribution of gas for illuminating and heating are classified under "Gas, manufactured, illuminating and heating."

No detailed statistics as to the quantities and values of the various classes of coke-oven products are compiled by the Census Bureau, as such statistics are published annually by the United States Bureau of Mines.

**Assignment of establishments to industries.**—Although the "Coke-oven products" industry, as defined for census purposes, consists primarily in the manufacture of coke and by-products as an independent operation, it also includes the operation of coke plants in conjunction with blast furnaces and other affiliated establishments, where such plants are reported as separate industrial units. Data for coal-mining operations, which are sometimes included in reports made by establishments operating their own mines, have been eliminated, so far as possible, and the cost of materials includes in all cases the total cost of the coal laid down at the ovens.

**Extent of coverage.**—The 1933 coverage of the establishments reporting in this industry for 1931 was practically complete. Of the 112 such establishments, only 2 failed to supply any information in regard to their status (active, idle, etc.) or their activities in 1933, but these establishments accounted for only a small fraction of 1 percent of the total number of wage earners and of the total value of products reported for this industry for 1931.



TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
	Thousands of dollars. (See sec. 25, p. 13)							
<i>United States</i>								
1933.....	97	1,422	13,066	3,150	15,527	123,275	165,731	42,456
1931.....	112	( <sup>4</sup> )	14,383	( <sup>4</sup> )	22,134	162,793	226,509	63,716
1929.....	153	2,951	20,552	7,451	33,389	281,592	416,348	134,756
1927.....	171	2,727	21,082	7,200	34,168	286,729	382,013	95,284
<i>States</i>								
Alabama:								
1933.....	6	113	804	241	678	4,922	7,091	2,169
1931.....	8	( <sup>4</sup> )	1,147	( <sup>4</sup> )	1,250	10,020	13,649	3,629
Illinois:								
1933.....	5	112	911	287	1,044	6,840	9,541	2,702
1931.....	6	( <sup>4</sup> )	1,227	( <sup>4</sup> )	1,829	13,192	17,473	4,282
Indiana:								
1933.....	4	41	706	102	1,007	11,155	13,266	2,111
1931.....	4	( <sup>4</sup> )	950	( <sup>4</sup> )	1,565	16,168	19,411	3,244
New York:								
1933.....	4	143	1,085	315	1,444	10,715	16,024	5,309
1931.....	4	( <sup>4</sup> )	844	( <sup>4</sup> )	1,495	11,125	17,732	6,607
Ohio:								
1933.....	14	209	2,105	454	2,442	17,711	22,591	4,880
1931.....	15	( <sup>4</sup> )	1,916	( <sup>4</sup> )	3,005	21,257	28,315	7,058
Pennsylvania:								
1933.....	34	433	3,188	828	3,584	30,069	39,946	9,877
1931.....	38	( <sup>4</sup> )	3,383	( <sup>4</sup> )	4,930	36,565	53,934	17,369
Virginia:								
1933.....	4	7	79	9	30	171	253	82
1931.....	6	( <sup>4</sup> )	97	( <sup>4</sup> )	49	253	374	121
West Virginia:								
1933.....	9	30	743	88	793	3,441	4,801	1,359
1931.....	11	( <sup>4</sup> )	640	( <sup>4</sup> )	972	4,620	7,878	3,258
Other States: <sup>5</sup>								
1933.....	17	334	3,446	825	4,504	38,251	52,218	13,967
1931.....	20	( <sup>4</sup> )	4,179	( <sup>4</sup> )	7,040	49,594	67,742	18,148

<sup>1</sup> Not including proprietors and firm members, as follows: 1933, 5; 1931, no data; 1929, 5; 1927, none.<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.<sup>3</sup> Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.<sup>4</sup> No data.<sup>5</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Colo., 2, 2; Conn., 1, 1; Ky., 1, 1; Md., 1, 1; Mass., 1, 1; Mich., 3, 3; Minn., 2, 3; N. J., 1, 2; Tenn., 2, 2; Utah, 2, 2; Wash., 0, 1; Wis., 1, 1.

TABLE 2.—WAGE EARNERS, BY QUARTERS, FOR SELECTED STATES: 1933 AND 1931

[The average for the year (table 1) differs from the average of the quarterly figures below. (See fourth sentence, sec. 13, p. 8.) See sec. 26, p. 13]

	1933 <sup>1</sup>				1931			
	March	June	Sept.	Dec.	March	June	Sept.	Dec.
United States.....	11,510	11,817	15,169	14,489	16,371	14,284	12,805	12,924
<i>States</i>								
Alabama.....	673	691	956	1,021	1,250	1,158	1,082	1,020
Illinois.....	897	864	952	924	1,443	1,214	1,068	1,080
Indiana.....	438	715	918	652	1,222	1,023	789	705
Michigan.....	846	867	984	938	1,135	1,135	1,134	1,124
New York.....	995	935	1,231	1,268	883	803	851	810
Ohio.....	1,790	1,990	2,434	2,208	2,135	1,972	1,680	1,695
Pennsylvania.....	2,740	2,747	3,951	3,656	4,222	3,220	2,646	2,850
Virginia.....	82	75	79	83	128	87	82	80
West Virginia.....	649	737	828	795	714	656	558	629

<sup>1</sup> See secs. 5, p. 4, and 13, p. 8. The 93 establishments canvassed with the standard schedule reported wage earners, by months, as follows:

January.....	11,601	May.....	10,962	September.....	15,098
February.....	11,752	June.....	11,745	October.....	14,569
March.....	11,440	July.....	13,836	November.....	14,419
April.....	10,912	August.....	15,157	December.....	14,405

## GAS, MANUFACTURED, ILLUMINATING AND HEATING

[A preliminary report for this industry was issued on Dec. 5, 1934]

**Description of the industry.**—This industry designation covers establishments, both commercial and municipal, engaged primarily in the manufacture of gas to be delivered through mains, for illuminating, household, and industrial purposes. It does not cover establishments which merely distribute gas not of their own manufacture. Blast-furnace gas and, with a few exceptions, gas resulting from by-product coke-oven operation are not treated as products of this industry. A considerable amount of by-product coke-oven gas is, however, purchased by commercial gas plants and used as an ingredient of manufactured gas. The products of the gas industry comprise not only gas but also the by-products resulting from its manufacture, such as coke, tar, ammonia, and light oil and its derivatives.

**Distribution of purchased gas.**—The 1933 figures in tables 1 and 6 do not include data for 4,336 wage earners (average for the year) employed in connection with the distribution of gas (mainly purchased gas) by 21 establishments whose principal business was the distribution of purchased gas. (These establishments employed 2,501 wage earners in the production of gas.) The cost and the selling value of gas purchased and resold by the 21 establishments in question have been excluded from the 1933 figures for cost of materials and value of products in table 1 and from the adjusted figures for 1931 in table 2, but data for all gas purchased by establishments classified in the industry are included in tables 3 and 4. The census records for 1931 do not show separately the number of wage earners employed in the distribution of gas, nor the cost of purchased gas, and for this reason the 1933 figures for these items as presented in tables 1 and 6 are not comparable with those published for 1931.

**Extent of coverage.**—The 1933 coverage of the establishments reporting in this industry for 1931 was substantially complete. Of the 638 such establishments, 12 failed to supply any information in regard to their status (active, idle, etc.) or their activities in 1933, but these establishments accounted for only a small fraction of 1 percent of the total number of wage earners and of the total value of products of this industry for that year.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>1</sup>	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>1</sup>
Thousands of dollars. (See sec. 25, p. 13)								
<i>United States</i>								
1933.....	543	19,256	26,250	31,149	36,980	79,189	295,480	216,292
1931 <sup>2</sup> .....	638	( <sup>3</sup> )	34,523	( <sup>4</sup> )	49,442	152,580	467,751	315,172
1929 <sup>2</sup> .....	764	22,559	43,055	40,774	61,322	188,416	512,653	324,236
1927 <sup>2</sup> .....	828	26,788	48,497	45,514	68,356	211,786	516,705	304,920
<i>States</i>								
Alabama.....	4	10	33	13	21	22	98	76
Arizona.....	8	51	86	30	94	260	1,002	742
Colorado.....	4	8	25	7	28	35	109	74
Connecticut.....	16	296	577	528	910	1,683	6,821	5,139
Florida.....	18	136	310	205	351	665	3,494	2,770
Georgia.....	8	58	122	74	108	207	1,063	855
Idaho.....	3	9	30	13	35	59	154	95
Illinois.....	29	3,045	897	4,871	1,424	4,451	12,922	8,471
Indiana.....	19	525	766	487	1,049	3,168	8,658	5,490
Iowa.....	42	192	429	253	534	1,359	5,780	4,421
Maine.....	7	85	157	138	227	415	1,731	1,316
Massachusetts.....	32	983	2,051	1,662	2,900	6,140	20,842	14,702
Michigan.....	47	789	1,842	1,266	2,135	5,342	19,500	14,158
New Hampshire.....	9	86	203	137	260	493	1,678	1,184
New Jersey.....	19	287	1,218	401	1,553	4,440	26,937	22,497
New York.....	34	7,653	10,388	13,327	16,242	28,612	102,876	74,264
North Carolina.....	25	82	246	118	287	633	2,473	1,840
Ohio.....	6	40	94	51	109	132	1,014	882
Pennsylvania.....	52	1,484	1,686	2,527	2,255	5,504	19,405	13,901
South Carolina.....	9	24	133	45	127	276	1,207	931
South Dakota.....	6	21	34	32	37	100	352	252
Vermont.....	9	31	59	52	77	140	754	614
Virginia.....	11	124	409	202	478	693	3,969	3,276
Washington.....	12	205	402	257	440	749	3,273	2,523
Wisconsin.....	28	604	689	831	870	2,417	7,815	5,399
Other States <sup>5</sup> .....	86	2,428	3,366	3,721	4,427	11,194	41,615	30,420

<sup>1</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.

<sup>2</sup> Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.

<sup>3</sup> The figures for 1931, 1929, and 1927 are mutually comparable, but are not comparable with those for 1933, for the reason that they include data for the purchase and resale of gas. See "Distribution of purchased gas," p. 362.

<sup>4</sup> No data.

<sup>5</sup> States included and numbers of establishments reporting are: Ark., 1; Calif., 10; Del., 2; D. C., 1; Ky., 4; Md., 10; Minn., 17; Mo., 10; Mont., 1; Nebr., 4; Nev., 1; N. Dak., 5; Oreg., 9; R. I., 4; Tenn., 5; W. Va., 2.

TABLE 2.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, 1933 AND 1931, AND BY KIND AND QUANTITY, 1929, FOR THE UNITED STATES

[Ton, 2,000 pounds]

	1933	1931 Comparable with 1933 <sup>1</sup>	1931 As published
1. Manufactured-gas industry, all products, total value.....	\$295,480,357	-----	\$467,751,449
2. Gas sold from production in the industry.....	248,668,809	\$311,548,186	399,680,704
3. By-products of gas manufacture.....	28,635,007	37,436,067	37,572,497
4. Other products, not normally belonging to the industry.....	695,988	779,319	795,360
5. Receipts from rents and sales of lamps and appliances.....	15,086,210	29,587,202	29,702,888
6. Gas and by-products, products not normally belonging to the industry, and receipts from rents and sales of lamps and appliances, not reported separately (on abbreviated schedule) <sup>2</sup> .....	2,394,343	-----	-----
7. Gas and by-products of gas manufacture (2 and 3).....	277,303,816	348,984,253	437,253,201

For footnotes, see end of table.

TABLE 2.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, 1933 AND 1931, AND BY KIND AND QUANTITY, 1929, FOR THE UNITED STATES—Continued

(Ton, 2,000 pounds)

	QUANTITY <sup>1</sup>				VALUE IN THOU- SANDS OF DOLLARS <sup>2</sup>	
	1933 Report- ed on standard schedule <sup>3</sup>	1931 Compa- rable with 1933 <sup>4</sup>	1931 As pub- lished; compa- rable with 1929	1929	1933 Report- ed on standard schedule <sup>3</sup>	1931 Compa- rable with 1933 <sup>4</sup>
Gas and by-products of gas manufacture, total.....					277,304	348,984
<i>Gas</i>	<i>Thous. M cu. ft.</i>	<i>Thous. M cu. ft.</i>	<i>Thous. M cu. ft.</i>	<i>Thous. M cu. ft.</i>		
Total production in the industry.....	239,282	299,268	301,471	347,508		
Sold.....	226,000	281,453	283,382	( <sup>4</sup> )	248,669	311,548
Consumed in plant and unac- counted for.....	13,283	17,814	18,089	( <sup>4</sup> )		
Water gas.....	152,500	193,533	195,199	224,172		
Coal-gas, including coke-oven gas.....	81,707	96,794	97,302	95,038		
Oil gas.....	4,744	8,142	8,171	27,892		
Other kinds of gas.....	330	799	799	406		
<i>By-products</i>	<i>M tons</i>	<i>M tons</i>	<i>M tons</i>	<i>M tons</i>		
Total produced for sale.....					28,635	37,436
Coke:						
Total production.....	4,453	5,525	5,548	5,614		
For sale.....	3,182	3,583	3,599	3,444	20,671	26,573
Consumed in plant.....	1,271	1,942	1,950	2,170		
Screenings and breeze:						
Total production.....	669	647	649	554		
For sale.....	168	65	66	72	498	177
Consumed in plant.....	501	582	583	482		
Tar:						
Total production.....	<i>M gal.</i> 174,503	<i>M gal.</i> 189,708	<i>M gal.</i> 190,452	<i>M gal.</i> 209,408		
For sale.....	113,581	149,195	149,891	163,695	4,521	6,597
Consumed in plant.....	60,921	40,513	40,560	45,714		
Crude light oil:						
Total production.....	6,480	6,884	6,884	5,272		
For sale.....	3,547	3,925	3,925	506	266	289
Consumed in plant.....	2,933	2,960	2,960	4,766		
Light oil derivatives, for sale.....	2,673	3,142	3,142	4,414	410	488
Drip and holder oil, for sale.....	2,659	3,499	3,499	4,747	171	243
Ammonia (NH <sub>3</sub> ) equivalent.....	<i>M lb.</i> 39,016	<i>M lb.</i> 37,853	<i>M lb.</i> 37,853	<i>M lb.</i> 36,216	852	1,721
Other by-products of gas manufacture.....					1,336	1,343

<sup>1</sup> See sec. 5c, p. 4. The figures given in this column represent the production, in 1931, of those classes of establishments (not in all cases the same individual establishments) which reported on the standard schedule for 1933. See also "Distribution of purchased gas," p. 362.

<sup>2</sup> See sec. 5c, p. 4.

<sup>3</sup> See sec. 25, p. 13.

<sup>4</sup> No data.

TABLE 3.—PRODUCTION, PURCHASE, AND DISPOSAL OF GAS, FOR THE UNITED STATES: 1933, 1931, AND 1929

[M cubic feet]

	1933	1931	1931	1929
	Reported on standard schedule <sup>1</sup>	Comparable with 1933 <sup>2</sup>	As published; comparable with 1929	
Total output.....	333, 136, 410	395, 493, 202	397, 696, 693	450, 717, 416
Produced in the industry.....	239, 282, 225	299, 267, 572	301, 471, 063	347, 508, 231
Purchased from outside the industry (natural and coke-oven gas).....	93, 854, 185	96, 225, 630	96, 225, 630	103, 209, 185
Disposal of gas:				
Sold.....	305, 503, 456	372, 138, 399	374, 067, 588	408, 401, 395
Consumed on premises.....	3, 838, 073	2, 896, 630	2, 924, 918	13, 255, 721
Unaccounted for.....	23, 794, 881	20, 458, 173	20, 704, 187	29, 060, 300

<sup>1</sup> See sec. 5c, p. 4.<sup>2</sup> See sec. 5c, p. 4. The figures given in this column refer to those classes of establishments (not in all cases the same individual establishments) which reported on the standard schedule for 1933.<sup>3</sup> Includes 6,184,801 M cubic feet for 1931 and 5,281,902 M cubic feet for 1929, purchased from establishments in the Gas Industry. No similar duplication is included in the corresponding figure for 1933.

TABLE 4.—SALES OF GAS—QUANTITY AND VALUE, AND NUMBER OF CUSTOMERS, BY CLASS OF SERVICE, FOR THE UNITED STATES: 1933, 1931, AND 1929

	1933	1931	1931	1929
	Reported on standard schedule <sup>1</sup>	Comparable with 1933 <sup>2</sup>	As published; comparable with 1929	
Total number of customers.....	7, 888, 724	9, 672, 725	9, 646, 386	10, 346, 864
Total sales, M cu. ft.....	305, 503, 456	372, 138, 399	374, 067, 588	408, 401, 395
Total value.....	\$321, 616, 615	\$396, 674, 414	\$399, 680, 704	\$438, 242, 970
Class of service:				
Domestic and house-heating:				
Number of customers.....	7, 496, 050	9, 148, 713	9, 220, 058	9, 860, 971
Sales, M cu. ft.....	226, 555, 617	273, 567, 215	275, 317, 555	298, 750, 634
Value.....	\$258, 612, 453	\$316, 909, 295	\$319, 668, 744	\$344, 592, 300
Industrial:				
Number of customers.....	58, 486	69, 139	69, 345	70, 675
Sales, M cu. ft.....	28, 085, 233	34, 386, 182	34, 462, 013	44, 157, 396
Value.....	\$19, 464, 640	\$28, 193, 611	\$28, 276, 708	\$35, 766, 553
Commercial:				
Number of customers.....	327, 170	349, 677	351, 760	411, 712
Sales, M cu. ft.....	35, 136, 393	43, 373, 702	43, 476, 299	47, 743, 942
Value.....	\$35, 507, 759	\$41, 387, 777	\$41, 651, 029	\$47, 560, 753
Municipal and Federal customers, gas-distributing companies:				
Number of customers.....	7, 018	5, 196	5, 223	3, 506
Sales, M cu. ft.....	15, 726, 213	20, 811, 300	20, 811, 721	17, 749, 423
Value.....	\$8, 031, 763	\$10, 183, 531	\$10, 184, 223	\$10, 323, 364

<sup>1</sup> See sec. 5c, p. 4.<sup>2</sup> See sec. 5c, p. 4. The figures given in this column refer to those classes of establishments (not in all cases the same individual establishments) which reported on the standard schedule for 1933.<sup>3</sup> See footnote 3, table 3.

TABLE 5.—CONSUMPTION OF GAS-MAKING MATERIALS AND FUELS, PRODUCED IN PLANT AND PURCHASED, BY KIND AND QUANTITY, FOR THE UNITED STATES: 1933, 1931, AND 1929

[Long ton, 2,240 pounds; short ton, 2,000 pounds; barrel, 42 gallons]

	1933	1931	1931	1929
	Reported on standard schedule <sup>1</sup>	Comparable with 1933 <sup>2</sup>	As published; comparable with 1929	
<b>Coal:</b>				
Anthracite:	<i>Long tons</i>	<i>Long tons</i>	<i>Long tons</i>	<i>Long tons</i>
Material.....	40,182	38,536	41,854	68,072
Fuel.....	70,287	73,245	74,330	110,422
Bituminous:	<i>Short tons</i>	<i>Short tons</i>	<i>Short tons</i>	<i>Short tons</i>
Material.....	7,473,101	9,009,399	9,054,749	8,917,607
Fuel:				
Boiler.....	369,567	528,991	544,578	849,234
Retort and bench.....	35,516	54,630	56,540	270,643
Coke and breeze:				
Produced in plant:				
Material.....	597,726	990,241	992,637	1,223,444
Fuel:				
Boiler.....	407,451	525,931	528,361	522,510
Retort and bench.....	750,850	929,327	933,123	878,386
Purchased:				
Material.....	717,178	936,933	955,190	1,248,111
Fuel:				
Boiler.....	104,798	102,582	103,356	74,560
Retort and bench.....	14,337	27,272	28,406	139,224
<b>Oil:</b>				
Material:	<i>Barrels</i>	<i>Barrels</i>	<i>Barrels</i>	<i>Barrels</i>
Gas-making.....	935,109	1,241,542	1,607,042	4,683,358
Carbureting.....	11,178,430	8,887,305	13,892,808	16,024,302
Fuel.....	571,680	498,056	498,056	1,248,182
Gas tars, for fuel.....	1,067,100	628,703	676,528	747,288

<sup>1</sup> See sec. 5c, p. 4.

<sup>2</sup> See sec. 5c, p. 4. The figures given in this column refer to those *classes* of establishments (not in all cases the same individual establishments) which reported on the standard schedule for 1933.

TABLE 6.—WAGE EARNERS, BY QUARTERS, FOR SELECTED STATES: 1933

[The average for the year (table 1) differs from the average of the quarterly figures below. (See fourth sentence, sec. 13, p. 8.) See sec. 26, p. 13]

	Mar.	June	Sept.	Dec.		Mar.	June	Sept.	Dec.
United States <sup>1</sup> .....	25,499	25,521	26,924	27,945	<i>States—Con.</i>				
<i>States</i>					Nebraska.....	219	256	275	310
Alabama.....	30	29	35	35	New Hampshire.....	192	209	207	206
Arizona.....	89	83	88	91	New Jersey.....	1,160	1,174	1,285	1,321
California.....	89	100	90	93	New York.....	10,234	10,114	10,480	10,992
Colorado.....	25	25	26	24	North Carolina.....	223	224	277	288
Connecticut.....	573	570	581	596	North Dakota.....	41	41	43	46
Florida.....	305	281	313	358	Ohio.....	87	87	100	104
Georgia.....	115	112	135	142	Oregon.....	356	394	400	371
Idaho.....	25	28	33	31	Pennsylvania.....	1,659	1,656	1,725	1,749
Illinois.....	875	886	897	951	Rhode Island.....	407	390	419	449
Indiana.....	726	728	807	841	South Carolina.....	130	125	148	145
Iowa.....	419	398	466	459	South Dakota.....	32	34	34	34
Maine.....	150	155	165	162	Tennessee.....	215	218	234	254
Maryland.....	313	308	314	323	Vermont.....	58	57	58	64
Massachusetts.....	2,024	2,000	2,087	2,192	Virginia.....	391	401	433	433
Michigan.....	1,782	1,854	1,813	1,888	Washington.....	385	357	447	448
Minnesota.....	469	478	530	530	Wisconsin.....	650	664	727	720
Missouri.....	327	336	357	385					

<sup>1</sup> See secs. 5, p. 4, and 13, p. 8. The 489 establishments canvassed with the standard schedule reported wage earners, by months, as follows:

January.....	25,334	May.....	25,036	September.....	26,573
February.....	25,346	June.....	25,176	October.....	27,203
March.....	25,158	July.....	25,194	November.....	27,524
April.....	25,090	August.....	25,594	December.....	27,586

## PETROLEUM REFINING

[A preliminary report for this industry was issued on Oct. 30, 1934]

**Description of the industry.**—This industry consists in the refining of crude petroleum by distillation. It does not, therefore, include the compounding of refined or partly refined petroleum products nor the production of gasoline from natural gas at the wells. The principal products, named in the order of their importance as measured by value, are gasoline, fuel oils, lubricating oils, and illuminating oils.

**Detailed statistics of products.**—The total value of products for this industry includes a comparatively small amount of duplication due to the fact that the "partially refined oils, sold for rerunning," and to some extent the "tops," reported as products by some establishments, become materials for others.

**Extent of coverage.**—The 1933 coverage of the establishments reporting in this industry for 1931 was practically complete. Of the 376 such establishments, 12 failed to supply any information in regard to their status (active, idle, etc.) or their activities in 1933, but these establishments accounted for only a small fraction of 1 percent of the total number of wage earners and of the total value of products reported for the industry for 1931.



TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
				Thousands of dollars. (See sec. 26, p. 13)				
United States								
1933.....	389	9,815	69,047	21,567	89,793	1,064,437	1,378,637	314,200
1931.....	376	( <sup>4</sup> )	68,824	( <sup>4</sup> )	107,474	1,210,517	1,524,285	313,768
1929.....	390	13,797	80,596	33,578	131,177	2,031,341	2,639,665	608,324
1927.....	354	12,059	71,234	30,900	113,717	1,752,997	2,142,649	389,651
States								
Arkansas:								
1933.....	8	103	529	244	540	5,368	7,370	2,002
1931.....	9	( <sup>4</sup> )	556	( <sup>4</sup> )	773	7,545	9,548	2,004
California:								
1933.....	48	1,213	6,858	2,942	9,636	168,572	212,939	44,368
1931.....	58	( <sup>4</sup> )	6,676	( <sup>4</sup> )	11,763	189,839	249,161	59,322
Illinois:								
1933.....	12	602	3,663	1,173	4,524	43,640	58,306	14,666
1931.....	10	( <sup>4</sup> )	3,265	( <sup>4</sup> )	5,191	47,597	63,052	15,455
Indiana:								
1933.....	6	623	4,965	1,517	6,500	85,630	113,219	27,589
1931.....	5	( <sup>4</sup> )	4,699	( <sup>4</sup> )	7,752	94,673	127,037	32,363
Kansas:								
1933.....	21	415	3,181	814	3,827	34,658	48,801	14,143
1931.....	16	( <sup>4</sup> )	2,637	( <sup>4</sup> )	3,983	33,375	52,025	18,149
Kentucky:								
1933.....	11	107	592	192	683	9,297	11,928	2,630
1931.....	8	( <sup>4</sup> )	643	( <sup>4</sup> )	906	10,108	12,892	2,783
Louisiana:								
1933.....	11	794	3,761	1,787	4,582	51,827	63,542	11,715
1931.....	10	( <sup>4</sup> )	4,585	( <sup>4</sup> )	6,713	60,599	68,000	7,407
Michigan:								
1933.....	8	41	316	79	375	9,462	10,885	1,423
1931.....	5	( <sup>4</sup> )	187	( <sup>4</sup> )	316	4,923	7,293	2,370
Montana:								
1933.....	18	83	215	148	278	3,234	4,441	1,207
1931.....	15	( <sup>4</sup> )	160	( <sup>4</sup> )	262	3,430	4,816	1,386
New Jersey:								
1933.....	8	953	7,152	2,263	10,802	99,377	130,975	31,598
1931.....	10	( <sup>4</sup> )	7,632	( <sup>4</sup> )	12,951	131,342	168,979	37,636
New Mexico:								
1933.....	9	15	71	38	98	1,183	1,428	245
New York:								
1933.....	5	194	2,048	455	2,750	28,650	35,436	6,786
1931.....	5	( <sup>4</sup> )	2,204	( <sup>4</sup> )	3,375	28,755	31,007	2,252
Ohio:								
1933.....	12	201	2,310	428	2,904	42,419	50,269	7,850
1931.....	14	( <sup>4</sup> )	2,370	( <sup>4</sup> )	3,473	43,932	50,923	6,991
Oklahoma:								
1933.....	43	390	4,664	851	5,970	55,774	74,255	18,481
1931.....	41	( <sup>4</sup> )	4,717	( <sup>4</sup> )	7,117	69,898	82,999	13,101
Pennsylvania:								
1933.....	37	1,461	8,495	2,894	11,558	123,179	165,516	42,337
1931.....	42	( <sup>4</sup> )	7,610	( <sup>4</sup> )	11,924	137,204	172,894	35,091
Texas:								
1933.....	90	2,003	15,795	4,315	18,700	226,635	298,081	71,446
1931.....	82	( <sup>4</sup> )	16,099	( <sup>4</sup> )	23,469	254,999	310,337	55,338
West Virginia:								
1933.....	5	61	458	141	559	7,600	8,174	575
1931.....	5	( <sup>4</sup> )	498	( <sup>4</sup> )	712	8,045	10,929	2,284
Wyoming:								
1933.....	15	168	900	437	1,396	16,627	17,179	553
1931.....	16	( <sup>4</sup> )	1,215	( <sup>4</sup> )	2,178	25,147	31,442	6,295
Other States: <sup>5</sup>								
1933.....	22	388	3,074	849	4,110	51,306	65,891	14,586
1931.....	25	( <sup>4</sup> )	3,071	( <sup>4</sup> )	4,617	53,607	71,546	12,940

<sup>1</sup> Not including proprietors and firm members, as follows: 1933, 28; 1931, no data; 1929, 12; 1927, 12.<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.<sup>3</sup> Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.<sup>4</sup> No data.<sup>5</sup> Figures for 1931 withheld to avoid disclosing approximations of data for individual establishments; included in those for "Other States."<sup>6</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Ala., 1, 0; Colo., 6, 5; Del., 1, 1; Ga., 2, 2; Iowa, 0, 1; Md., 3, 3; Mass., 2, 2; Mo., 1, 2; Nebr., 1, 0; N. Mex. (1931), 4; R. I., 2, 2; S. C., 1, 1; Utah, 1, 1; Va., 1, 1.

TABLE 2.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, 1933 AND 1931, AND BY KIND AND QUANTITY, 1929, FOR THE UNITED STATES

[Ton, 2,000 pounds]

	1933	1931 Comparable with 1933 <sup>1</sup>	1931 As published
1. Petroleum-refining industry, all products, total value.	\$1, 378, 636, 948	-----	\$1, 524, 284, 997
2. Refinery products.....	1, 357, 997, 461	\$1, 502, 258, 631	1, 514, 641, 450
3. Other products (not normally belonging to the industry).....	5, 493, 592	8, 739, 882	8, 739, 882
4. Receipts for contract work.....	1, 022, 618	903, 665	903, 665
5. Refinery products, other products, and receipts for contract work, not reported separately (on abbreviated schedule) <sup>2</sup> .....	14, 123, 277	-----	-----

  

	QUANTITY <sup>3</sup>				VALUE IN THOUSANDS OF DOLLARS <sup>4</sup>	
	1933	1931	1931		1933	1931
	Reported on standard schedule <sup>1</sup>	Comparable with 1933 <sup>1</sup>	As published; comparable with 1929	1929	Reported on standard schedule <sup>1</sup>	Comparable with 1933 <sup>1</sup>
Refinery products, aggregate.....					1, 357, 997	1, 502, 259
Light products of distillation (except tops), total.....	<i>M gal.</i> 16, 354, 818	<i>M gal.</i> 17, 432, 723	<i>M gal.</i> 17, 595, 043	<i>M gal.</i> 18, 251, 372	773, 182	846, 254
Gasoline.....	16, 094, 531	16, 949, 078	17, 100, 621	17, 538, 789	759, 183	824, 300
Naphtha.....	228, 516	450, 397	461, 174	662, 642	12, 251	20, 146
Benzine.....	31, 771	33, 247	33, 247	49, 941	1, 747	1, 808
Illuminating oils.....	1, 949, 863	1, 732, 908	1, 745, 447	2, 338, 929	78, 128	72, 285
Fuel oils, total.....	13, 295, 107	13, 999, 089	14, 209, 692	16, 390, 954	253, 237	267, 881
Distillates.....	1, 598, 816	1, 013, 171	1, 055, 597	1, 024, 364	49, 648	27, 116
Gas oils.....	1, 977, 443	2, 525, 230	2, 562, 148	2, 832, 959	53, 931	67, 837
Residual fuel oils.....	9, 718, 848	10, 460, 689	10, 591, 948	12, 483, 631	149, 658	172, 928
Partially refined oils sold for re-running, total.....	1, 130, 068	1, 311, 126	1, 313, 270	1, 466, 861	23, 734	28, 418
Above fuel oil.....	760, 697	890, 944	891, 280	869, 056	-----	-----
Fuel oil.....	345, 215	382, 937	383, 803	567, 533	-----	-----
Below fuel oil.....	24, 156	37, 245	38, 187	80, 273	-----	-----
Lubricating oils, total.....	1, 047, 212	1, 145, 431	1, 147, 767	1, 553, 711	142, 444	197, 093
Black; cylinder; red, neutral, pale, and paraffin.....	650, 475	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	74, 178	( <sup>4</sup> )
All other lubricating oils, including compounded (except cylinder) oils.....	396, 736	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	68, 266	( <sup>4</sup> )
Liquid asphaltic road oils.....	300, 243	375, 116	377, 748	323, 002	8, 343	10, 352
Greases, total.....	41, 923	45, 211	45, 816	52, 017	9, 261	12, 225
Petrolatum, mineral jelly, etc.....	14, 711	16, 353	16, 959	13, 664	1, 855	2, 071
Lubricating greases, including axle grease.....	27, 212	28, 858	28, 858	38, 354	7, 396	10, 153
Paraffin wax.....	72, 852	79, 377	79, 453	84, 639	12, 211	13, 340
Acid oil.....	85, 627	84, 560	84, 560	34, 767	1, 015	1, 119
Asphalt other than liquid asphalt.....	<i>M tons</i> 1, 790	<i>M tons</i> 2, 462	<i>M tons</i> 2, 462	<i>M tons</i> 3, 115	17, 932	21, 751
Petroleum coke.....	1, 751	2, 025	2, 029	1, 265	5, 582	7, 173
Other refinery products (including tops).....					32, 940	24, 368

<sup>1</sup> See sec. 5c, p. 4. The figures given in this column represent the production, in 1931, of those classes of establishments (not in all cases the same individual establishments) which reported on the standard schedule for 1933.

<sup>2</sup> See sec. 5c, p. 4.

<sup>3</sup> See sec. 25, p. 13.

<sup>4</sup> No comparable data.

TABLE 3.—WAGE EARNERS, BY QUARTERS, FOR SELECTED STATES: 1933 AND 1931

[The average for the year (table 1) differs from the average of the quarterly figures below. (See fourth sentence, sec. 13, p. 8.) See sec. 26, p. 13]

	1933 <sup>1</sup>				1931			
	March	June	Sept.	Dec.	March	June	Sept.	Dec.
United States.....	64, 222	65, 756	74, 517	76, 366	72, 019	68, 715	66, 614	65, 594
<i>States</i>								
Arkansas.....	455	460	617	636	560	558	583	469
California.....	6, 507	6, 702	7, 334	7, 254	7, 093	6, 792	6, 358	6, 167
Colorado.....	105	105	115	110	98	101	96	95
Illinois.....	3, 387	3, 624	3, 981	3, 922	3, 428	3, 188	3, 175	2, 972
Indiana.....	4, 792	4, 898	5, 354	5, 137	4, 552	4, 767	4, 477	4, 785
Kansas.....	2, 858	3, 101	3, 531	3, 470	2, 684	2, 568	2, 718	2, 442
Kentucky.....	555	604	640	568	729	776	541	505
Louisiana.....	3, 711	3, 688	3, 827	3, 911	5, 531	4, 471	3, 918	3, 763
Maryland.....	1, 021	961	1, 026	1, 023	1, 035	953	997	1, 064
Michigan.....	285	281	342	361	180	185	186	191
Montana.....	149	238	268	212	197	162	151	140
New Jersey.....	6, 962	6, 758	7, 316	7, 922	7, 847	7, 415	7, 548	7, 687
New Mexico.....	54	94	72	102	24	24	24	24
New York.....	2, 129	1, 870	2, 151	2, 206	2, 210	2, 174	2, 183	2, 303
Ohio.....	2, 130	2, 045	2, 541	2, 585	2, 217	2, 441	2, 536	2, 667
Oklahoma.....	4, 290	4, 414	5, 111	5, 244	4, 929	4, 782	4, 598	4, 429
Pennsylvania.....	7, 701	7, 951	9, 392	9, 599	7, 465	7, 518	7, 778	7, 518
Texas.....	13, 874	14, 666	17, 478	18, 620	17, 477	16, 247	15, 131	14, 778
West Virginia.....	443	428	489	479	510	470	503	491
Wyoming.....	905	922	924	933	1, 229	1, 225	1, 221	1, 167

<sup>1</sup> See secs. 5, p. 4, and 13, p. 8. The 318 establishments canvassed with the standard schedule reported wage earners, by months, as follows:

January.....	63, 352	May.....	64, 417	September.....	73, 508
February.....	62, 976	June.....	64, 916	October.....	75, 107
March.....	63, 514	July.....	65, 415	November.....	75, 519
April.....	63, 897	August.....	69, 761	December.....	75, 296

## GROUP 8.—RUBBER PRODUCTS

### THE GROUP AS A WHOLE

[See p. 39]

[Preliminary reports for the Rubber industries were issued on June 7, 1934, and subsequent dates]

This group comprises three industries, namely, (1) "Rubber tires and inner tubes"; (2) "Boots and shoes, rubber"; and (3) "Rubber goods other than tires, inner tubes, and boots and shoes." The establishments in each of these industries use india rubber or gutta-percha as an important constituent in the manufacture of their products of chief value.

**Description of the industries.**—The "Rubber tires and inner tubes" industry embraces those establishments which are engaged primarily in the manufacture of pneumatic tires, inner tubes, and solid and cushion rubber tires, for any class of vehicles.

The establishments assigned to the "Boots and shoes, rubber" industry are those whose leading products are rubber boots, shoes, overshoes, and rubber-soled canvas shoes. (Statistics for the manufacture of boots and shoes from materials other than rubber are presented in a separate report.)

The principal products of the "Rubber goods other than tires, inner tubes, and boots and shoes" industry are rubber belting and hose, rubber heels and soles, reclaimed rubber, rubberized fabrics, and hard-rubber goods. (This industry does not include the manufacture of rubber-insulated wire and cable, which are treated as products of the "Electrical machinery, apparatus, and supplies" industry.)

**Extent of coverage.**—All the establishments in the "Rubber boots and shoes" and "Rubber tires and inner tubes" industries that reported at the census for 1931 were accounted for in the canvass for 1933. As the result of a variety of causes beyond the Bureau's control, including the numerous industrial changes which were taking place during the period, the Census coverage of the "Rubber goods other than tires, inner tubes, and boots and shoes" industry was slightly incomplete. Of the 390 establishments that reported for 1931, 9, or 2.3 percent, failed to supply any information in regard to their status (active, idle, etc.) or activities in 1933; but these establishments accounted for only three-tenths of 1 percent of the total number of wage earners and of the total value of products reported for this industry for 1931.

## SUMMARY FOR GROUP 8.—RUBBER PRODUCTS: 1927 TO 1933

INDUSTRY	Cen- sus year	Num- ber of estab- lish- ments	Wage earners (aver- age for the year)	Wages	Cost of materials, containers, fuel and purchased electric energy	Value of products	Value added by manu- facture <sup>1</sup>
Total for the group-----	1933	408	106,283	\$99,116,552	\$211,396,716	\$472,743,587	\$261,346,871
	1931	453	99,259	112,596,379	252,867,163	614,265,307	361,398,144
	1929	526	149,148	207,305,857	578,677,681	1,117,460,252	538,782,571
	1927	516	141,997	198,073,743	660,370,209	1,225,077,114	564,706,905
Boots and shoes, rubber-----	1933	13	18,102	14,440,403	14,124,109	42,018,877	27,894,768
	1931	15	15,882	13,769,928	12,298,297	47,905,467	35,607,170
	1929	22	25,659	29,945,265	34,396,466	102,537,625	68,141,159
	1927	22	26,848	32,078,955	43,372,916	124,607,801	81,234,885
Rubber goods other than tires, inner tubes, and boots and shoes.	1933	351	35,205	29,938,836	57,880,537	131,411,447	73,530,910
	1931	390	34,218	35,737,867	66,964,680	160,076,717	93,112,037
	1929	412	40,226	50,278,617	114,674,244	244,745,737	130,071,493
	1927	385	36,893	45,930,934	117,776,651	230,781,250	113,004,599
Rubber tires and inner tubes.	1933	44	52,976	54,737,313	139,392,070	299,313,263	150,921,193
	1931	48	49,159	63,088,584	173,604,186	406,283,123	232,678,937
	1929	91	83,263	127,081,975	429,606,971	770,176,890	340,569,919
	1927	109	78,256	120,063,854	499,220,642	869,688,063	370,467,421

<sup>1</sup> Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.

TABLE 1.—SUMMARY FOR THE RUBBER INDUSTRIES, FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931

[See sec. 26, p. 13]

	Number of estab- lish- ments	Number of sal- aried employ- ees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, fuel and purchased electric energy	Value of products	Value added by man- ufacture <sup>3</sup>
Thousands of dollars. (See sec. 25, p. 13)								
<b>THE GROUP AS A WHOLE</b>								
<i>United States</i>								
1933.....	408	14,874	106,283	26,323	99,117	211,397	472,744	261,347
1931.....	453	(4)	90,259	(4)	112,596	252,807	614,265	361,398
1929.....	525	22,831	149,148	55,353	207,306	578,678	1,117,460	538,783
1927.....	516	26,596	141,997	60,659	198,074	660,370	1,225,077	564,707
<b>RUBBER TIRES AND INNER TUBES</b>								
<i>United States</i>								
1933.....	44	8,251	52,976	15,911	54,737	139,392	299,313	159,921
1931.....	48	(4)	49,159	(4)	63,089	173,604	406,283	232,679
1929.....	91	12,981	83,263	31,098	127,082	429,607	770,177	340,570
1927.....	109	17,162	78,256	40,430	120,064	499,221	869,688	370,467
<i>States</i>								
<i>California:</i>								
1933.....	5	409	3,145	770	3,118	10,359	20,979	10,620
1931.....	5	(4)	3,756	(4)	4,931	17,378	36,438	19,060
<i>Ohio:</i>								
1933.....	15	5,667	35,621	11,309	37,888	80,003	188,617	108,614
1931.....	18	(4)	32,180	(4)	41,933	105,530	255,981	150,448
<i>Other States:<sup>4</sup></i>								
1933.....	24	2,175	14,210	3,832	13,731	49,030	89,718	40,687
1931.....	25	(4)	13,223	(4)	16,225	50,693	113,864	63,171
<b>RUBBER BOOTS AND SHOES</b>								
<i>United States</i>								
1933.....	13	2,029	18,102	3,168	14,440	14,124	42,019	27,895
1931.....	15	(4)	15,882	(4)	13,770	12,208	47,905	35,607
1929.....	22	3,610	25,659	7,745	29,945	34,396	102,538	68,141
1927.....	22	3,419	26,848	5,181	32,079	43,373	124,608	81,235
<i>States</i>								
<i>Massachusetts:</i>								
1933.....	5	997	6,678	1,820	5,740	5,988	18,292	12,304
1931.....	4	(4)	6,277	(4)	6,393	4,636	19,116	14,481
<i>Other States:<sup>7</sup></i>								
1933.....	8	1,032	11,424	1,340	8,700	8,136	23,727	15,591
1931.....	11	(4)	9,605	(4)	7,377	7,663	28,789	21,127
<b>RUBBER GOODS OTHER THAN TIRES, INNER TUBES, AND BOOTS AND SHOES</b>								
<i>United States</i>								
1933.....	351	4,594	35,205	7,244	29,939	57,881	131,411	73,531
1931.....	390	(4)	34,218	(4)	35,738	66,965	160,077	93,112
1929.....	412	6,234	40,226	16,510	50,279	114,674	244,746	130,071
1927.....	385	6,015	36,893	15,048	45,931	117,777	230,781	113,005
<i>States</i>								
<i>California:</i>								
1933.....	31	153	890	262	784	1,553	3,890	2,337
1931.....	23	(4)	686	(4)	901	1,712	4,234	2,522
<i>Connecticut:</i>								
1933.....	14	240	2,510	384	1,825	3,794	8,188	4,394
1931.....	15	(4)	2,323	(4)	2,277	4,816	10,795	5,980
<i>Illinois:</i>								
1933.....	19	166	1,343	263	1,231	1,940	4,502	2,562
1931.....	23	(4)	1,003	(4)	1,160	1,866	4,425	2,559
<i>Indiana:</i>								
1933.....	8	83	997	132	665	1,112	2,682	1,571
1931.....	12	(4)	1,032	(4)	1,061	1,900	4,390	2,490

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE RUBBER INDUSTRIES, FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
				Thousands of dollars. (See sec. 25, p. 13)				
RUBBER GOODS OTHER THAN TIRES, INNER TUBES, AND BOOTS AND SHOES—continued								
States—Continued								
Michigan:								
1933.....	7	56	546	111	498	1,067	2,250	1,183
1931.....	9	(4)	371	(4)	433	1,084	2,619	1,535
Missouri:								
1933.....	9	64	785	131	604	1,457	3,368	1,911
1931.....	9	(4)	758	(4)	732	1,833	4,237	2,404
New Jersey:								
1933.....	40	1,016	7,162	1,674	6,772	11,269	25,936	14,066
1931.....	45	(4)	6,664	(4)	7,658	11,668	29,812	18,144
New York:								
1933.....	38	403	4,073	748	3,972	8,141	17,745	9,604
1931.....	42	(4)	4,361	(4)	4,752	9,161	21,026	11,865
Ohio:								
1933.....	66	640	5,274	853	4,132	7,205	16,749	9,544
1931.....	81	(4)	6,151	(4)	5,948	8,508	24,309	15,800
Pennsylvania:								
1933.....	17	229	1,479	399	1,186	2,322	5,235	2,913
1931.....	19	(4)	1,498	(4)	1,655	3,175	7,470	4,295
Rhode Island:								
1933.....	7	266	2,979	490	2,320	3,599	9,222	5,623
1931.....	7	(4)	2,645	(4)	2,355	3,520	10,296	6,776
Texas:								
1933.....	4	9	34	11	24	95	185	90
1931.....	6	(4)	71	(4)	61	89	273	184
Wisconsin:								
1933.....	8	73	403	100	263	660	1,665	1,005
1931.....	6	(4)	306	(4)	257	522	1,035	513
Other States: <sup>4</sup>								
1933.....	83	1,196	6,731	1,684	5,662	13,667	29,794	16,127
1931.....	93	(4)	6,349	(4)	6,491	17,112	35,157	18,045

<sup>1</sup> Not including proprietors and firm members, as follows: "Rubber tires and inner tubes," 1933, 1; 1931, no data; 1929, 5; 1927, 4. "Rubber boots and shoes," 1933, none; 1931, no data; 1929, none; 1927, none. "Rubber goods other than tires, inner tubes, and boots and shoes," 1933, 78; 1931, no data; 1929, 105; 1927, 101.

<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927 in which such data are included. No data for employees of central administrative offices are included in the figures for any year.

<sup>3</sup> Value of products less cost of materials, containers, fuel, and purchased electric energy.

<sup>4</sup> No data.

<sup>5</sup> As Massachusetts is one of the leading States in the manufacture of rubber goods, it is desirable to present separate statistics for that State, so far as possible. The Massachusetts figures for the "Rubber tires and inner tubes" industry cannot, however, be given separately without disclosing data for individual establishments, and they have therefore been combined with those for the "Rubber goods other than tires, inner tubes, and boots and shoes" industry, as follows:

	1933	1931		1933	1931
Number of establishments.....	56	60	Cost of materials, containers, fuel, and purchased electric energy.....	\$17,518,000	\$19,929,000
Salaried officers and employees.....	1,309	(4)	Value of products.....	35,954,000	46,371,000
Wage earners (average for the year).....	6,844	6,728	Value added by manufacture.....	18,436,000	26,442,000
Salaries.....	\$2,112,000	(4)			
Wages.....	6,204,000	\$7,758,000			

<sup>6</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Ala., 1, 1; Colo., 1, 1; Conn., 2, 2; Ill., 1, 1; Ind., 1, 1; Iowa, 2, 2; Md., 2, 2; Mass., 1, 1 (see footnote 5); Mich., 2, 2; Minn., 1, 1; N. J., 3, 3; N. Y., 1, 1; N. C., 1, 1; Pa., 4, 4; Wis., 1, 2.

<sup>7</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Conn., 2, 2; Ill., 1, 1; Ind., 1, 1; N. J., 2, 2; Pa., 0, 1; R. I., 1, 3; Wis., 1, 1.

<sup>8</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Ark., 1, 1; Colo., 1, 1; Del., 2, 2; Ga., 1, 3; Iowa, 1, 2; Kans., 1, 1; Ky., 1, 2; La., 1, 1; Me., 2, 2; Md., 5, 4; Mass., 56, 69 (see footnote 5); Minn., 2, 2; Miss., 1, 1; N. H., 1, 1; N. C., 1, 2; Oreg., 3, 3; Tenn., 1, 1; Va., 1, 3; Wash., 2, 2.

TABLE 2.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, 1933 AND 1931, AND BY KIND AND QUANTITY, 1929, FOR THE UNITED STATES

[See sec. 25, p. 13]

	1933	1931 Comparable with 1933 <sup>1</sup>	1931 As published
1. The "Rubber products" group of industries, total value.....	\$472, 743, 587	-----	\$614, 265, 307
2. Rubber goods.....	465, 309, 741	\$605, 680, 918	609, 393, 566
3. Other products (not normally belonging to the industries).	4, 480, 077	4, 788, 842	4, 871, 741
4. Rubber goods and other products, not reported separately (on abbreviated schedule) <sup>2</sup> .....	2, 953, 769	-----	-----
5. Rubber goods made as secondary products in other industries.....	3, 305, 223	3, 018, 895	3, 018, 895
6. Rubber goods, total value (sum of 2 and 5).....	468, 614, 964	608, 699, 813	612, 412, 461

  

	QUANTITY				VALUE IN THOU- SANDS OF DOLLARS	
	1933 Report- ed on standard schedule <sup>2</sup>	1931 Compa- rable with 1933 <sup>1</sup>	1931 As pub- lished; compara- ble with 1929	1929	1933 Report- ed on standard schedule <sup>2</sup>	1931 Compa- rable with 1933 <sup>1</sup>
Rubber goods, aggregate value.....					468, 615	608, 700
(a) Tires and inner tubes, total value.....					256, 513	266, 865
Pneumatic:						
Motor-vehicle, except motor-						
cycle:						
Casings, total.....	Thou- sands 45, 376	Thou- sands 49, 143	Thou- sands 49, 143	Thou- sands 69, 765	221, 051	314, 381
Balloon.....	39, 472	42, 326	42, 326	51, 640	177, 206	256, 068
High-pressure.....	5, 904	6, 817	6, 817	18, 125	43, 845	58, 313
Inner tubes, total.....	42, 904	49, 167	49, 167	74, 043	29, 413	44, 616
Motorcycle and bicycle cas-						
ings, inner tubes, and single-						
tube tires <sup>3</sup> .....	3, 908	2, 835	2, 835	3, 737	2, 302	2, 411
Solid and cushion:						
Truck.....	85	112	112	424	2, 225	4, 055
Other (tractor, trailer, indus-						
trial-truck, carriage tiring,						
etc.) <sup>4</sup> .....					1, 521	1, 403
(b) Rubber boots and shoes, total value.....					41, 513	48, 308
Rubber boots.....	M pairs 2, 622	M pairs 1, 971	M pairs 1, 971	M pairs 5, 454	4, 659	4, 775
Rubber shoes and overshoes, total.....	32, 984	27, 145	27, 145	51, 357	23, 042	26, 378
Lumbermen's.....	1, 201	983	983	1, 817	1, 661	2, 089
Arctics and gaiters.....	15, 815	10, 990	10, 990	19, 245	13, 374	14, 661
Other rubber shoes, rubbers, and footholds.....	15, 968	15, 172	15, 172	30, 295	8, 006	9, 628
Rubber-soled canvas shoes.....	29, 689	28, 082	28, 082	43, 954	13, 813	17, 155
(c) Rubber goods other than tires, inner tubes, and boots and shoes, total value.....					170, 589	193, 527
Rubber heels, for sale as such.....	272, 504	246, 956	248, 257	292, 719	11, 119	11, 582
Rubber soles, including composi- tion or fiber, for sale as such.....	91, 995	59, 584	59, 609	46, 189	8, 316	8, 383
Rubber soling strips.....	M sq. ft. 10, 753	M sq. ft. 8, 896	M sq. ft. 8, 917	M sq. ft. 4, 313	1, 711	1, 973
Rubberized fabrics, for sale as such, total.....	M yards 71, 251	M yards 63, 670	M yards 63, 999	M yards 92, 967	18, 198	17, 584
Automobile and carriage.....	8, 620	10, 425	10, 425	22, 408	3, 362	5, 398
Hospital sheeting.....	2, 240	2, 685	2, 685	3, 048	741	1, 047
Raincoat fabrics.....	18, 064	14, 963	15, 092	25, 576	5, 456	4, 206
Other.....	42, 327	35, 597	35, 797	41, 936	8, 640	6, 932

For footnotes, see end of table.



TABLE 2.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, 1933 AND 1931, AND BY KIND AND QUANTITY, 1929, FOR THE UNITED STATES—Continued

[See sec. 25, p. 13]

	QUANTITY				VALUE IN THOUSANDS OF DOLLARS	
	1933 Reported on standard schedule <sup>1</sup>	1931 Compa- rable with 1933 <sup>1</sup>	1931 As pub- lished; compara- ble with 1929	1929	1933 Reported on standard schedule <sup>2</sup>	1931 Compa- rable with 1933 <sup>1</sup>
Rubber goods—Continued						
(c) Rubber goods, etc.—Continued						
Mechanical rubber goods, total value.....					56,799	65,884
Rubber belting, total.....	<i>M lb.</i> 30,628	<i>M lb.</i> 30,605	<i>M lb.</i> 30,606	<i>M lb.</i> 45,024	12,923	13,608
Transmission.....	13,745	14,008	14,508	21,575	6,512	6,721
Conveyor.....	8,536	10,763	10,763	15,443	2,704	3,884
Other.....	8,347	5,334	5,335	8,006	3,712	3,003
Rubber tubing.....	13,280	5,431	5,707	16,235	1,313	1,146
Rubber packing.....	9,328	9,235	9,266	17,923	1,872	2,197
Washers, gaskets, valves, pump sleeves, liner strips....	3,811	5,646	5,981	13,320	1,474	2,381
Rubber and friction tape.....	11,439	14,813	14,923	20,426	2,134	2,803
Rubber hose, total.....	<i>M ft.</i> 178,432	<i>M ft.</i> 191,688	<i>M ft.</i> 193,328	<i>M ft.</i> 271,979	16,762	20,847
Garden.....	108,548	122,979	123,754	145,255	3,783	6,011
Fire.....	7,603	11,631	11,631	15,567	2,622	3,856
Other.....	67,280	57,077	57,943	111,157	10,356	10,979
Jar rings.....	<i>M gross</i> 7,442	<i>M gross</i> 10,950	<i>M gross</i> 10,950	<i>M gross</i> 8,438	1,784	3,115
Rubber-covered rolls (all sizes).....					2,661	2,211
Other mechanical rubber goods, including plumbers' rubber goods.....					15,871	17,576
Rubber flooring.....	<i>M sq. ft.</i> 4,325	<i>M sq. ft.</i> 7,524	<i>M sq. ft.</i> 7,524	<i>M sq. ft.</i> 8,566	1,237	2,924
Rubber mats and matting.....					3,926	4,493
Hard-rubber goods, total value.....					9,928	11,370
Battery jars, boxes, and parts.....					4,339	5,577
Other.....					5,589	5,793
Tire sundries and repair materials.....					7,430	9,086
Reclaimed rubber, for sale as such.....	<i>M lb.</i> 168,503	<i>M lb.</i> 216,158	<i>M lb.</i> 216,509	<i>M lb.</i> 363,696	5,965	9,964
Rubber thread.....	4,809	5,498	5,498	5,728	2,236	2,904
Stationers' rubber goods:						
Erasers.....	1,473	1,306	1,306	1,833	635	663
Rubber bands.....	3,309	3,436	3,436	3,489	810	1,169
Rubber cement.....	<i>M gal.</i> 3,742	<i>M gal.</i> 4,744	<i>M gal.</i> 5,343	<i>M gal.</i> 6,050	2,100	2,906
Rubber gloves:	<i>M doz.</i>	<i>M doz.</i>	<i>M doz.</i>	<i>M doz.</i>		
Surgeons'.....	<i>prs.</i> 334	<i>prs.</i> 358	<i>prs.</i> 442	<i>prs.</i> 474	619	582
Other.....	676	537	555	577	1,057	1,251
Druggists' and medical sundries (except rubber gloves), total.....					5,766	8,270
Water bottles and fountain syringes.....	<i>M doz.</i> 552	<i>M doz.</i> 485	<i>M doz.</i> 487	<i>M doz.</i> 693	2,191	2,374
Other.....					3,564	5,896
Bathing caps.....	1,223	1,176	1,178	1,090	1,338	1,793
Sponge-rubber products not else- where specified.....					1,490	
Other manufactures of rubber.....					29,920	30,756

<sup>1</sup> See sec. 5c, p. 4. The figures given in this column represent the production, in 1931, of those *classes* of establishments (not in all cases the same individual establishments) which reported on the standard schedule for 1933.

<sup>2</sup> See sec. 5c, p. 4. The abbreviated schedule was used for "Rubber goods other than tires, inner tubes, and boots and shoes" industry but not for the other industries in the "Rubber products" group.

<sup>3</sup> Combined to avoid disclosing approximations of data for individual establishments.

<sup>4</sup> Includes data for a small quantity of casings and tubes other than those for motor vehicles, motorcycles, and bicycles.

<sup>5</sup> Includes values of rubber clothing, \$7,248,386; toy balloons, \$996,407; and playballs and other rubber toys, \$2,493,930. For total value of rubber clothing made in rubber industries and wearing apparel industries, see reports on men's clothing and women's clothing; and for total value of rubber toys manufactured see report entitled "Toys, games, and playground equipment"; "Carriages and sleds, children's."

TABLE 3.—RUBBER CONSUMED IN THE RUBBER INDUSTRIES, BY KIND, QUANTITY, AND COST, FOR THE UNITED STATES: 1933, 1931, AND 1929

[Ton, 2,240 pounds]

	1933 Reported on standard schedule <sup>1</sup>	1931 Adjusted for comparison with 1933 <sup>2</sup>	1931 As published; comparable with 1929	1929
<i>Crude and reclaimed rubber consumed, by industries</i>				
Crude rubber consumed:				
Total tons.....	393,871	344,444	345,533	462,101
Total cost.....	\$44,749,520	\$72,835,518	\$73,090,717	\$209,458,746
"Rubber tires and inner tubes" industry:				
Tons.....	315,718	286,635	286,635	400,364
Cost.....	\$34,913,896	\$59,972,477	\$59,972,477	\$180,592,960
"Rubber boots and shoes" industry:				
Tons.....	17,994	11,210	11,210	18,938
Cost.....	\$2,237,959	\$2,550,335	\$2,550,335	\$8,907,713
"Rubber goods other than tires, inner tubes, and boots and shoes" industry:				
Tons.....	60,159	46,599	47,688	42,799
Cost.....	\$7,597,665	\$10,312,706	\$10,537,905	\$19,958,073
Reclaimed rubber consumed:				
Total tons.....	81,936	116,822	124,035	206,091
Total cost.....	\$6,421,753	\$11,917,850	\$11,974,302	\$26,864,425
"Rubber tires and inner tubes" industry:				
Tons.....	40,203	74,047	74,047	115,855
Cost.....	\$3,143,675	\$7,013,917	\$7,013,917	\$16,639,046
"Rubber boots and shoes" industry:				
Tons.....	1,252	2,788	2,788	10,019
Cost.....	\$117,960	\$286,205	\$286,205	\$1,350,141
"Rubber goods other than tires, inner tubes, and boots and shoes" industry:				
Tons.....	40,481	39,987	47,200	80,217
Cost.....	\$3,160,118	\$4,617,728	\$4,674,180	\$8,575,238
<i>Crude rubber consumed, by class of products made</i>				
Rubber tires and inner tubes:				
Pneumatic:				
Motor-vehicle, except motorcycle:	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
Casings.....	250,072	225,867	225,867	303,375
Inner tubes.....	40,579	42,505	42,505	62,902
Motorcycle, bicycle, and other casings and tubes.....	2,102	1,099	1,099	1,497
Solid and cushion.....	2,789	4,022	4,022	10,874
Boots and shoes.....	17,823	11,611	11,611	20,798
Rubber heels and soles, including slab soles.....	19,054	11,947	12,020	9,104
Rubberized fabrics and rubberized clothing (finished).....	9,141	7,331	7,375	7,665
Mechanical rubber goods:				
Belting.....	3,872	3,355	3,357	4,828
Hose and tubing.....	8,028	5,035	5,147	7,170
Other.....	12,656	9,055	9,288	10,159
Rubber flooring and rubber mats and matting.....	3,152	2,663	2,672	1,906
Hard-rubber goods.....	2,197	1,384	1,406	2,148
Tire sundries and repair materials.....	5,414	3,427	3,438	4,421
Rubber thread.....	2,126	2,547	2,547	3,080
Rubber cement.....	818	1,397	1,540	1,824
Rubber gloves.....	535	448	519	549
Druggists' and medical sundries.....	1,794	2,183	2,280	2,091
Toys.....	1,941	2,136	2,216	2,267
Stationers' rubber goods, bathing caps, and golf and tennis balls.....	3,729	2,008	2,015	2,319
Other manufactures of rubber.....	6,049	4,424	4,659	3,124

<sup>1</sup> See footnote 2, table 2.<sup>2</sup> See sec. 5c, p. 4.

TABLE 4.—WAGE EARNERS, BY QUARTERS, FOR THE RUBBER INDUSTRIES, BY STATES: 1933 AND 1931

† The average for the year (table 1) differs from the average of the quarterly figures below. (See fourth sentence, sec. 13, p. 8.) See sec. 26, p. 13]

	1933 <sup>1</sup>				1931			
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
<b>THE GROUP AS A WHOLE</b>								
United States.....	84,904	103,364	127,335	118,648	101,255	103,557	97,180	95,180
<b>RUBBER TIRES AND INNER TUBES</b>								
United States.....	42,260	54,099	62,543	57,766	49,607	52,013	47,762	46,507
<i>States</i>								
California.....	2,538	3,293	3,762	3,299	3,822	4,336	3,550	3,364
New Jersey.....	337	371	443	332	276	397	430	295
Ohio.....	28,867	36,357	40,902	39,251	32,212	33,607	31,560	30,846
Pennsylvania.....	1,451	1,771	2,194	1,667	1,244	1,326	1,281	1,247
<b>RUBBER BOOTS AND SHOES</b>								
United States.....	14,415	14,719	22,629	23,174	16,188	16,253	15,339	16,479
<i>State</i>								
Massachusetts.....	4,917	5,854	8,139	8,372	5,597	6,372	6,565	6,311
<b>RUBBER GOODS OTHER THAN TIRES, INNER TUBES, AND BOOTS AND SHOES</b>								
United States.....	28,229	34,546	42,163	37,718	35,460	35,291	34,079	32,194
<i>States</i>								
California.....	752	883	1,004	925	623	750	509	611
Connecticut.....	2,235	2,504	2,924	2,403	2,427	2,334	2,273	2,265
Illinois.....	859	1,381	1,655	1,090	1,194	1,044	910	923
Indiana.....	785	931	1,323	1,130	991	1,024	1,019	1,040
Michigan.....	381	648	596	687	419	398	373	361
Missouri.....	699	844	844	757	654	852	906	702
New Jersey.....	5,302	6,671	9,177	8,331	6,834	6,884	6,482	6,165
New York.....	3,486	3,937	4,506	4,037	4,803	4,462	4,106	4,087
Ohio.....	4,072	5,002	6,636	5,929	6,769	6,388	5,887	5,673
Oregon.....	49	55	58	50	47	49	48	47
Pennsylvania.....	1,178	1,425	1,792	1,504	1,555	1,560	1,486	1,311
Rhode Island.....	2,817	2,968	3,099	2,969	2,535	2,817	2,717	2,589
Texas.....	30	30	35	40	71	77	73	63
Wisconsin.....	809	375	510	432	287	278	364	303

<sup>1</sup> See secs. 5, p. 4, and 13, p. 8. The establishments canvassed with the standard schedule reported wage earners, by months, as follows:

<b>Rubber tires and inner tubes.</b> Number of establishments reported on standard schedules, 44.			
January.....	43,081	May.....	47,553
February.....	43,156	June.....	54,099
March.....	42,280	July.....	60,169
April.....	41,848	August.....	64,133
September.....	62,543	October.....	60,411
November.....	58,702	December.....	57,756
<b>Rubber boots and shoes.</b> Number of establishments reported on standard schedules, 13.			
January.....	15,642	May.....	14,289
February.....	15,230	June.....	14,719
March.....	14,415	July.....	15,890
April.....	13,907	August.....	20,588
September.....	22,629	October.....	22,903
November.....	23,838	December.....	23,174
<b>Rubber goods other than tires, inner tubes, and boots and shoes.</b> Number of establishments reported on standard schedules, 264.			
January.....	27,405	May.....	30,813
February.....	27,893	June.....	33,513
March.....	27,350	July.....	36,884
April.....	28,713	August.....	40,568
September.....	40,980	October.....	40,624
November.....	38,582	December.....	36,649

## GROUP 9.—LEATHER AND ITS MANUFACTURES

---

### THE GROUP AS A WHOLE

[See p. 39]

The leather group is made up of 10 industries, namely: (1) Leather: Tanned, curried, and finished; (2) Belting and packing, leather; (3) Boot and shoe cut stock, not made in boot and shoe factories; (4) Boot and shoe findings, not made in boot and shoe factories; (5) Boots and shoes, other than rubber; (6) Gloves and mittens, leather; (7) Pocketbooks, purses, and cardcases; (8) Saddlery, harness, and whips; (9) Trunks, suitcases, and bags; (10) Leather goods not elsewhere classified.

**Duplication in group totals for cost of materials and value of products.**—The cost-of-materials and value-of-products figures for the leather industries group as a whole include a considerable amount of duplication resulting from the use of the products of establishments in certain industries as materials by establishments in other industries. In other words, the total value of products for the group includes not only the factory value of the finished products in the form in which they reach the final purchaser, but also the value of the products of the "Leather: Tanned, curried, and finished" industry, which are used as materials in the other leather industries, and the value of the products of the "Boot and shoe cut stock" and "Boot and shoe findings" industries, which are used as materials in the boot and shoe industry proper. Similarly, the total cost of materials for the group includes not only the cost of the hides and other basic raw materials produced outside the leather group and used as materials by tanneries but also the amounts paid for tannery products and for boot and shoe cut stock and boot and shoe findings by establishments which use these products as materials for further manufacture. Furthermore, reduplication occurs in the case of boot and shoe cut stock not made in boot and shoe factories; for the value of the leather used in making such stock appears three times in the total value of products for the group—once as reported by the tanneries, again as a part of the value of the cut stock, and still again as a part of the value of finished boots and shoes. Within any one of the industries, however, there is little duplication resulting from the use of the products of some establishments as materials by others.

## SUMMARY FOR GROUP 9.—LEATHER AND ITS MANUFACTURES: 1927 TO 1933

INDUSTRY	Cen- sus year	Num- ber of estab- lish- ments	Wage earn- ers (aver- age for the year)	Wages	Cost of ma- terials, con- tainers, fuel, and pur- chased electric energy	Value of products	Value added by manu- facture <sup>1</sup>
Aggregate for the group.	1933	3,265	282,000	\$222,487,448	\$544,737,292	\$996,772,988	\$452,035,606
	1931	3,702	272,757	262,129,700	666,200,319	1,189,876,183	523,675,864
	1929	4,285	318,472	359,460,686	1,132,022,266	1,906,200,994	774,178,728
	1927	4,272	316,081	364,536,761	1,088,316,473	1,869,615,351	780,798,878
Leather: Tanned, cur- ried, and finished.	1933	374	44,191	43,075,957	138,176,928	237,202,248	99,025,320
	1931	418	42,047	49,541,526	172,785,669	271,137,694	98,352,025
	1929	471	49,932	63,413,707	337,597,868	481,340,299	143,742,431
	1927	494	52,924	67,887,231	331,984,736	494,255,838	162,271,102
Finished products of leather, total.	1933	2,891	237,811	179,411,491	406,560,364	759,570,740	353,010,376
	1931	3,284	230,710	212,588,274	493,414,680	918,738,489	425,323,839
	1929	3,814	268,540	296,046,979	794,424,398	1,424,860,695	630,436,297
	1927	3,778	263,157	296,649,530	756,831,737	1,375,359,513	618,527,776
Belting and packing-----	1933	152	1,634	1,732,911	7,017,728	14,879,808	7,862,075
	1931	178	1,640	1,967,521	7,302,010	14,521,751	7,219,741
	1929	207	2,602	3,549,721	20,679,778	35,631,682	14,951,904
	1927	173	2,164	2,925,416	16,185,267	27,265,752	11,080,485
Boot and shoe cut stock, not made in boot and shoe factories.	1933	159	6,544	5,807,644	43,617,503	56,279,666	12,662,163
	1931	191	8,584	8,148,093	64,132,247	79,734,359	15,602,112
	1929	210	9,499	10,319,996	107,545,777	133,447,914	25,902,137
	1927	201	8,611	9,354,049	97,966,431	121,022,421	23,055,990
Boot and shoe findings, not made in boot and shoe factories.	1933	328	10,254	8,109,858	18,246,693	37,013,600	18,766,907
	1931	361	9,088	8,263,507	18,141,709	37,366,416	19,224,707
	1929	382	10,376	11,058,252	31,964,401	58,625,445	26,661,044
	1927	379	9,950	11,201,872	31,862,322	57,433,389	25,571,067
Boots and shoes, other than rubber.	1933	1,132	190,914	142,054,152	286,303,143	558,425,166	267,122,023
	1931	1,156	181,374	163,271,281	337,627,472	653,879,746	316,252,274
	1929	1,341	205,640	222,407,732	515,055,246	965,922,694	450,867,448
	1927	1,357	203,110	225,090,242	494,553,016	944,714,463	450,161,447
Gloves and mittens -----	1933	194	8,129	6,433,710	11,376,732	23,470,054	12,093,322
	1931	227	7,884	7,553,974	13,136,380	28,023,634	14,887,254
	1929	257	9,203	9,203,911	20,205,740	39,122,729	18,916,989
	1927	232	9,106	8,813,012	19,276,416	36,662,053	17,385,637
Leather goods not elsewhere classified.	1933	201	4,547	3,516,478	9,175,649	18,425,258	9,249,609
	1931	355	5,221	5,321,486	11,973,958	26,011,625	14,037,667
	1929	392	6,035	6,759,742	18,013,489	35,951,013	17,937,524
	1927	413	7,188	8,379,080	21,539,590	43,291,552	21,751,962
Pocketbooks, purses, and card cases.	1933	218	8,107	5,954,292	15,348,920	28,345,054	12,996,134
	1931	260	8,747	9,792,878	22,600,817	43,147,053	20,546,236
	1929	290	10,430	15,229,422	35,351,605	68,627,515	33,275,910
	1927	257	8,570	13,169,509	29,618,524	57,344,655	27,726,131
Saddlery, harness, and whips.	1933	147	2,515	2,053,726	6,145,912	10,364,157	4,218,245
	1931	185	1,974	1,926,404	5,268,042	9,339,203	4,071,161
	1929	268	3,396	3,751,442	13,914,427	23,562,774	9,648,347
	1927	271	4,113	4,630,763	16,701,936	27,666,547	10,964,611
Trunks, suitcases, and bags--	1933	270	5,117	3,748,720	9,328,084	17,367,982	8,039,898
	1931	371	6,198	6,343,130	13,232,015	26,714,702	13,482,687
	1929	467	11,359	13,756,761	31,693,935	63,968,929	32,274,994
	1927	495	10,345	13,084,687	29,128,235	59,958,681	30,830,446

<sup>1</sup> Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.<sup>2</sup> Revised; revision not carried into group total.

**LEATHER: TANNED, CURRIED, AND FINISHED; BELTING AND PACKING, LEATHER; BOOTS AND SHOES, OTHER THAN RUBBER; BOOT AND SHOE FINDINGS, NOT MADE IN BOOT AND SHOE FACTORIES; POCKETBOOKS, PURSES, AND CARDCASES**

[Preliminary reports for these industries were issued on Oct. 13, 1934, and subsequent dates]

**Description of the industries.**—The "Leather: Tanned, curried, and finished" industry designation covers tanneries producing leather, whether from hides and skins owned by them or on a contract basis from hides and skins belonging to others, and establishments engaged in currying and finishing leather. Tanneries operating on a contract basis are directed to report the amounts received for work done but not the value of the leather produced nor the cost of the hides and skins treated. Some of this contract work is done for establishments in this industry which report the value of their entire output of finished leather, including that tanned or otherwise treated on contract for them. A considerable amount of contract tanning is done, however, on hides and skins owned by manufacturers in the glove, clothing, and other industries, and therefore no data for the quantities and values of the leather thus produced for such manufacturers are included in table 2, the figures in which consequently understate somewhat the total production of leather. Practically all the products of this industry are used as materials for further manufacture, largely in the other leather industries but to some extent in industries outside the leather group.

The establishments classified in the "Belting and packing, leather" industry are engaged primarily in the manufacture of leather belting, chiefly for use in the transmission of power, or of leather packing (cup, U, valve, oil-retainer-seal, etc.). (Leather belts for wear on the person are products of the "Leather goods not elsewhere classified" industry. The manufacture of rubber belting is included in the "Rubber goods other than tires, inner tubes, and boots and shoes" industry.)

The establishments in the "Boots and shoes, other than rubber" industry are those whose principal products are boots, shoes, sandals, slippers, moccasins, and allied footwear, and leggings, overgaiters, etc., made chiefly of leather but to some extent of canvas and of other textile fabrics. Some of the establishments in the industry make only moccasins, sandals, spats, etc.

The "Boot and shoe findings, not made in boot and shoe factories" industry embraces establishments engaged in the manufacture, for sale as such, of wood heels, welting, shoe pegs, bows, clasps, stays, metal tips and heelplates, toe caps, heel caps, buckles, staples, counters, shanks, shoe trimmings, and other findings for the boot and shoe trade. Many manufacturers of boots and shoes make findings, principally for their own consumption but also to some extent for sale, and establishments in some other industries manufacture them

as secondary products. The output of the "Boot and shoe findings" industry does not, therefore, represent the entire production of findings.

The principal products of the establishments covered by the "Pocketbooks, purses, and cardcases" industry classification are leather pocketbooks, purses, women's purse-handbags, cardcases, wallets, coin purses, bill folds, etc.

**Extent of coverage.**—As the result of a variety of causes, including the numerous industrial changes which were in progress during the period, the census canvass of the industries covered by this report was slightly, but not seriously, incomplete, especially in the cases of the "Boots and shoes, other than rubber" and the "Boot and shoe findings, not made in boot and shoe factories" industries. Of the 1,156 establishments reporting for 1931 in the first of these industries and the 361 reporting in the second, 71 and 9, respectively, failed to supply any information in regard to their status (active, idle, etc.) or their activities in 1933, but these establishments accounted for less than 1.6 percent of the total number of wage earners and of the total value of products reported for the respective industries for 1931. For the "Leather: Tanned, curried, and finished" industry, the "Belting and packing, leather" industry, and the "Pocketbooks, purses, and cardcases" industry, the coverage was more nearly complete. Although 12 establishments in the first of these industries, 3 in the second, and 10 in the third failed to supply any information for 1933, these establishments accounted for less than six-tenths of 1 percent of the total number of wage earners and of the total value of products reported for the respective industries for 1931.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of contract work	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
Thousands of dollars. (See sec. 25, p. 13)									
<b>LEATHER: TANNED, CURRIED, AND FINISHED</b>									
<i>United States</i>									
1933.....	374	2,817	44,191	5,833	43,076	-----	138,177	237,202	99,025
1931.....	418	( <sup>4</sup> )	42,047	( <sup>4</sup> )	49,542	-----	172,786	271,138	98,352
1929.....	471	4,291	49,932	15,649	63,414	-----	337,598	481,340	143,742
1927.....	494	4,400	52,924	13,856	67,887	-----	331,985	494,256	162,271
<i>States</i>									
<b>California:</b>									
1933.....	11	40	520	104	568	-----	1,635	2,971	1,336
1931.....	11	( <sup>4</sup> )	389	( <sup>4</sup> )	507	-----	1,509	2,546	1,038
<b>Connecticut:</b>									
1933.....	4	21	181	65	147	-----	376	681	305
1931.....	4	( <sup>4</sup> )	140	( <sup>4</sup> )	169	-----	285	545	260
<b>Illinois:</b>									
1933.....	23	191	3,403	363	3,547	-----	12,664	20,586	7,922
1931.....	25	( <sup>4</sup> )	3,479	( <sup>4</sup> )	4,076	-----	13,848	20,501	8,653

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1,2</sup>	Number of wage earners (average for the year)	Salaries <sup>1</sup>	Wages	Cost of contract work	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
Thousands of dollars. (See sec. 25, p. 13)									
LEATHER: TANNED, CURRIED, AND FINISHED—continued									
States—Continued									
Indiana:									
1933.....	6	19	327	32	244	-----	913	2,216	1,803
1931.....	6	( <sup>4</sup> )	264	( <sup>4</sup> )	211	-----	1,299	1,718	420
Kentucky:									
1933.....	4	33	477	70	360	-----	1,868	2,894	1,026
1931.....	5	( <sup>4</sup> )	440	( <sup>4</sup> )	422	-----	2,791	3,440	649
Maine:									
1933.....	3	7	84	16	63	-----	78	232	154
1931.....	4	( <sup>4</sup> )	79	( <sup>4</sup> )	80	-----	247	408	161
Maryland:									
1933.....	3	17	488	29	341	-----	930	2,523	1,593
1931.....	4	( <sup>4</sup> )	553	( <sup>4</sup> )	507	-----	1,679	2,621	942
Massachusetts:									
1933.....	100	836	9,950	1,528	11,078	-----	27,193	48,630	21,437
1931.....	98	( <sup>4</sup> )	8,657	( <sup>4</sup> )	10,698	-----	29,966	50,051	20,085
Michigan:									
1933.....	11	127	2,511	230	1,854	-----	6,259	10,116	3,857
1931.....	13	( <sup>4</sup> )	1,990	( <sup>4</sup> )	2,068	-----	6,942	10,143	3,201
Missouri:									
1933.....	4	25	218	52	171	-----	646	1,220	574
1931.....	4	( <sup>4</sup> )	240	( <sup>4</sup> )	218	-----	966	1,767	740
New Jersey:									
1933.....	36	208	2,303	528	2,495	-----	7,191	13,335	6,144
1931.....	44	( <sup>4</sup> )	3,380	( <sup>4</sup> )	4,478	-----	12,657	22,405	9,748
New York:									
1933.....	43	233	4,684	589	5,723	-----	17,705	29,510	11,805
1931.....	56	( <sup>4</sup> )	4,715	( <sup>4</sup> )	6,497	-----	21,936	33,288	11,352
North Carolina:									
1933.....	8	62	912	100	588	-----	4,032	6,562	2,530
1931.....	8	( <sup>4</sup> )	1,008	( <sup>4</sup> )	721	-----	6,266	8,465	2,199
Ohio:									
1933.....	14	98	1,384	230	1,303	-----	5,728	8,750	3,022
1931.....	17	( <sup>4</sup> )	1,361	( <sup>4</sup> )	1,693	-----	5,916	9,379	3,463
Oregon:									
1933.....	4	4	19	5	16	-----	72	113	41
1931.....	3	( <sup>4</sup> )	28	( <sup>4</sup> )	21	-----	48	89	41
Pennsylvania:									
1933.....	46	433	7,834	1,014	7,198	-----	25,278	43,623	18,245
1931.....	57	( <sup>4</sup> )	7,924	( <sup>4</sup> )	9,463	-----	40,816	60,282	19,465
Virginia:									
1933.....	7	26	531	73	345	-----	2,352	2,978	626
1931.....	7	( <sup>4</sup> )	572	( <sup>4</sup> )	526	-----	2,895	4,517	1,623
West Virginia:									
1933.....	7	34	824	76	546	-----	3,515	5,291	1,776
1931.....	8	( <sup>4</sup> )	785	( <sup>4</sup> )	715	-----	4,684	6,374	1,691
Wisconsin:									
1933.....	17	240	3,381	404	2,831	-----	9,019	15,653	6,634
1931.....	17	( <sup>4</sup> )	2,916	( <sup>4</sup> )	3,059	-----	8,070	14,077	6,007
Other States: <sup>5</sup>									
1933.....	23	163	4,132	324	3,658	-----	10,724	19,418	8,693
1931.....	27	( <sup>4</sup> )	3,127	( <sup>4</sup> )	3,411	-----	9,967	18,582	8,615
BELTING AND PACKING, LEATHER									
United States									
1933.....	152	477	1,684	769	1,733	-----	7,018	14,880	7,862
1931.....	178	( <sup>4</sup> )	1,640	( <sup>4</sup> )	1,968	-----	7,802	14,622	7,220
1929.....	207	815	2,602	2,859	3,550	-----	20,680	35,632	14,952
1927.....	173	761	2,164	2,019	2,925	-----	16,185	27,266	11,080

For footnotes, see end of table.



TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 to 1933, AND FOR STATES, 1933 AND 1931—Continued

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of contract work	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
Thousands of dollars. (See sec. 25, p. 13)									
<b>BELTING AND PACKING, LEATHER—CON.</b>									
<i>States</i>									
California:									
1933.....	8	21	39	25	50	-----	138	312	174
1931.....	9	( <sup>4</sup> )	41	( <sup>4</sup> )	67	-----	175	385	210
Connecticut:									
1933.....	5	4	12	4	9	-----	83	139	56
1931.....	6	( <sup>4</sup> )	13	( <sup>4</sup> )	21	-----	74	122	48
Indiana:									
1933.....	4	3	12	3	11	-----	40	76	36
1931.....	5	( <sup>4</sup> )	16	( <sup>4</sup> )	17	-----	54	121	67
Massachusetts:									
1933.....	17	91	303	158	293	-----	1,309	3,037	1,728
1931.....	18	( <sup>4</sup> )	300	( <sup>4</sup> )	335	-----	1,464	2,916	1,452
Michigan:									
1933.....	8	29	144	43	157	-----	883	1,604	721
1931.....	8	( <sup>4</sup> )	168	( <sup>4</sup> )	195	-----	834	1,617	783
Missouri:									
1933.....	8	15	40	20	43	-----	188	330	124
1931.....	8	( <sup>4</sup> )	43	( <sup>4</sup> )	53	-----	203	397	194
New York:									
1933.....	25	76	183	116	213	-----	880	1,807	927
1931.....	29	( <sup>4</sup> )	174	( <sup>4</sup> )	270	-----	1,074	1,876	802
Ohio:									
1933.....	12	23	47	36	57	-----	197	410	214
1931.....	13	( <sup>4</sup> )	49	( <sup>4</sup> )	61	-----	179	395	216
Pennsylvania:									
1933.....	15	41	207	69	202	-----	917	1,766	879
1931.....	15	( <sup>4</sup> )	178	( <sup>4</sup> )	228	-----	896	1,769	872
Washington:									
1933 <sup>5</sup> .....	3	2	5	( <sup>7</sup> )	4	-----	19	32	13
Other States: <sup>8</sup>									
1933.....	47	172	692	294	694	-----	2,364	5,336	2,972
1931.....	67	( <sup>4</sup> )	658	( <sup>4</sup> )	721	-----	2,349	4,924	2,575
<b>BOOT AND SHOE FINDINGS</b>									
<i>United States</i>									
1933.....	328	927	10,254	1,639	8,110	-----	18,247	37,014	18,767
1931.....	361	( <sup>4</sup> )	9,088	( <sup>4</sup> )	8,264	-----	18,142	37,366	19,225
1929.....	382	1,435	10,376	3,866	11,058	-----	31,994	58,625	26,661
1927.....	379	1,534	9,950	3,364	11,202	-----	31,862	57,433	25,571
<i>States</i>									
Maine:									
1933.....	4	15	183	24	125	-----	242	494	252
1931.....	6	( <sup>4</sup> )	207	( <sup>4</sup> )	161	-----	320	723	403
Massachusetts:									
1933.....	201	516	5,213	939	4,254	-----	9,375	19,701	10,326
1931.....	221	( <sup>4</sup> )	4,201	( <sup>4</sup> )	3,917	-----	9,042	19,283	9,342
Missouri:									
1933.....	18	70	917	101	689	-----	1,405	3,039	1,634
1931.....	18	( <sup>4</sup> )	908	( <sup>4</sup> )	740	-----	1,078	2,716	1,639
New Hampshire:									
1933.....	10	40	738	65	542	-----	1,655	3,028	1,373
1931.....	24	( <sup>4</sup> )	819	( <sup>4</sup> )	734	-----	1,993	3,797	1,774
New York:									
1933.....	40	106	1,228	167	969	-----	2,270	4,180	1,910
1931.....	43	( <sup>4</sup> )	1,142	( <sup>4</sup> )	1,102	-----	1,900	4,325	2,424

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

[See sec. 26, p. 13]

	Num- ber of estab- lish- ments	Num- ber of salaried employ- ees <sup>1</sup>	Num- ber of wage earners (aver- age for the year)	Sala- ries <sup>2</sup>	Wages	Cost of con- tract work	Cost of mate- rials, con- tainers, fuel, and pur- chased electric energy	Value of prod- ucts	Value added by manu- fac- ture <sup>3</sup>
Thousands of dollars. (See sec. 25, p. 13)									
<b>BOOT AND SHOE FINDINGS—CON.</b>									
<i>States—Continued</i>									
Ohio:									
1933.....	8	30	343	52	230	-----	322	852	531
1931.....	9	( <sup>1</sup> )	265	( <sup>1</sup> )	249	-----	263	822	559
Rhode Island:									
1933.....	8	27	169	44	129	-----	219	504	285
1931.....	9	( <sup>1</sup> )	153	( <sup>1</sup> )	148	-----	160	478	318
Wisconsin:									
1933.....	6	16	275	41	234	-----	726	1,295	569
1931.....	5	( <sup>1</sup> )	175	( <sup>1</sup> )	173	-----	505	861	356
Other States: <sup>4</sup>									
1933.....	24	107	1,190	205	938	-----	2,033	3,921	1,888
1931.....	26	( <sup>1</sup> )	1,218	( <sup>1</sup> )	1,039	-----	1,932	4,390	2,409
<b>BOOTS AND SHOES, OTHER THAN RUBBER</b>									
<i>United States</i>									
1933.....	1,132	11,881	190,914	17,830	142,054	-----	286,303	553,425	267,122
1931.....	1,156	( <sup>1</sup> )	181,374	( <sup>1</sup> )	163,271	-----	337,627	653,880	316,252
1929.....	1,341	19,595	205,640	44,285	222,408	-----	515,055	965,923	450,867
1927.....	1,357	20,326	203,110	43,344	225,090	-----	494,553	944,714	450,161
<i>States</i>									
California:									
1933.....	13	48	614	72	457	-----	829	1,671	842
1931.....	10	( <sup>1</sup> )	453	( <sup>1</sup> )	348	-----	710	1,624	913
Illinois:									
1933.....	60	719	15,759	1,044	9,580	-----	22,561	46,117	23,556
1931.....	60	( <sup>1</sup> )	13,526	( <sup>1</sup> )	9,652	-----	26,659	52,457	25,798
Indiana:									
1933.....	8	152	1,910	191	1,128	-----	3,161	5,554	2,393
1931.....	8	( <sup>1</sup> )	1,456	( <sup>1</sup> )	974	-----	2,695	4,805	2,110
Iowa:									
1933.....	4	23	309	30	193	-----	467	903	437
1931.....	4	( <sup>1</sup> )	243	( <sup>1</sup> )	178	-----	398	705	307
Kansas:									
1933.....	4	12	37	16	29	-----	41	101	60
1931.....	5	( <sup>1</sup> )	68	( <sup>1</sup> )	69	-----	91	257	106
Kentucky:									
1933.....	4	57	1,236	77	651	-----	1,310	2,921	1,610
1931.....	6	( <sup>1</sup> )	1,280	( <sup>1</sup> )	774	-----	2,036	3,712	1,676
Maine:									
1933.....	51	609	11,695	1,009	8,141	-----	16,593	30,671	14,079
1931.....	38	( <sup>1</sup> )	9,138	( <sup>1</sup> )	7,515	-----	14,228	27,444	13,216
Maryland:									
1933.....	10	150	2,543	214	1,604	-----	3,148	6,217	3,069
1931.....	12	( <sup>1</sup> )	2,308	( <sup>1</sup> )	1,580	-----	3,212	6,567	3,355
Massachusetts:									
1933.....	389	3,155	46,739	4,478	36,559	-----	65,591	128,074	62,482
1931.....	397	( <sup>1</sup> )	47,664	( <sup>1</sup> )	45,679	-----	79,520	160,666	81,146
Michigan:									
1933.....	7	48	709	64	500	-----	1,507	2,488	981
1931.....	8	( <sup>1</sup> )	675	( <sup>1</sup> )	539	-----	1,451	3,020	1,569
Minnesota:									
1933.....	7	131	770	157	546	-----	1,463	2,423	961
1931.....	7	( <sup>1</sup> )	689	( <sup>1</sup> )	586	-----	1,275	2,634	1,359

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1 2</sup>	Number of wage earners (average for the year)	Salaries <sup>3</sup>	Wages	Cost of contract work	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>4</sup>
<i>Thousands of dollars. (See sec. 25, p. 13)</i>									
<b>BOOTS AND SHOES, OTHER THAN RUBBER—continued</b>									
<i>States—Continued</i>									
Missouri:									
1933.....	49	963	22,138	1,295	14,785	-----	39,485	73,201	33,716
1931.....	49	( <sup>1</sup> )	19,878	( <sup>1</sup> )	16,193	-----	49,076	86,296	37,220
New Hampshire:									
1933.....	56	671	11,593	1,144	9,245	-----	19,044	35,168	16,124
1931.....	63	( <sup>1</sup> )	13,847	( <sup>1</sup> )	12,511	-----	27,810	49,946	22,136
New Jersey:									
1933.....	16	80	1,364	148	1,050	-----	2,583	4,328	1,745
1931.....	16	( <sup>1</sup> )	1,108	( <sup>1</sup> )	968	-----	1,633	3,840	2,206
New York:									
1933.....	246	2,040	33,769	3,302	31,133	-----	50,438	99,401	48,963
1931.....	266	( <sup>1</sup> )	33,804	( <sup>1</sup> )	37,704	-----	65,417	128,632	63,215
Ohio:									
1933.....	33	897	11,206	1,353	7,232	-----	14,282	30,971	16,689
1931.....	36	( <sup>1</sup> )	10,739	( <sup>1</sup> )	8,638	-----	16,633	34,440	17,807
Pennsylvania:									
1933.....	91	675	10,077	1,184	6,623	-----	12,571	25,009	12,438
1931.....	88	( <sup>1</sup> )	9,297	( <sup>1</sup> )	7,446	-----	13,511	27,871	14,361
Tennessee:									
1933.....	7	191	2,809	217	1,852	-----	6,476	11,122	4,647
1931.....	5	( <sup>1</sup> )	2,140	( <sup>1</sup> )	1,670	-----	5,393	10,126	4,732
Washington:									
1933.....	4	7	49	13	47	-----	103	160	57
1931.....	5	( <sup>1</sup> )	50	( <sup>1</sup> )	59	-----	124	243	119
Wisconsin:									
1933.....	46	945	10,037	1,376	7,537	-----	17,348	34,119	16,770
1931.....	47	( <sup>1</sup> )	9,589	( <sup>1</sup> )	7,725	-----	17,044	35,012	17,968
Other States: <sup>10</sup>									
1933.....	27	308	5,546	446	3,160	-----	7,304	12,806	5,502
1931.....	26	( <sup>1</sup> )	3,422	( <sup>1</sup> )	2,504	-----	8,712	13,582	4,870
<b>POCKETBOOKS, PURSES, AND CARDGAMES</b>									
<i>United States</i>									
1933.....	218	715	8,107	1,011	5,954	1,041	15,349	28,345	12,996
1931.....	260	( <sup>1</sup> )	8,747	( <sup>1</sup> )	9,793	432	22,601	43,147	20,546
1929.....	290	1,441	10,430	4,652	15,229	( <sup>1</sup> )	35,352	68,628	33,276
1927.....	257	1,228	8,570	3,170	13,170	( <sup>1</sup> )	29,619	57,345	27,726
<i>States</i>									
California:									
1933.....	9	20	62	16	59	( <sup>11</sup> )	96	204	108
1931.....	6	( <sup>1</sup> )	67	( <sup>1</sup> )	100	-----	146	300	153
Illinois:									
1933.....	10	46	378	53	237	5	421	918	497
1931.....	13	( <sup>1</sup> )	350	( <sup>1</sup> )	369	-----	693	1,361	667
Massachusetts:									
1933.....	21	68	1,420	108	903	9	1,545	3,190	1,646
1931.....	24	( <sup>1</sup> )	1,073	( <sup>1</sup> )	829	( <sup>11</sup> )	1,706	3,618	1,911
Missouri:									
1933.....	4	12	63	18	37	-----	81	201	119
1931.....	5	( <sup>1</sup> )	106	( <sup>1</sup> )	70	-----	109	355	246
New Jersey:									
1933.....	8	29	487	39	242	1	922	1,557	635
1931.....	7	( <sup>1</sup> )	390	( <sup>1</sup> )	343	-----	680	1,469	789

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1, 2</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of contract work	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
Thousands of dollars. (See sec. 25, p. 13)									
POCKETBOOKS, PURSES, AND CARDCASES—CON.									
States—Continued									
New York:									
1933.....	129	328	3, 145	473	3, 035	1, 008	9, 010	15, 976	6, 965
1931.....	153	(4)	4, 318	(4)	6, 201	343	16, 027	27, 601	12, 575
Ohio:									
1933.....	4	13	72	21	41	-----	86	209	124
1931.....	8	(4)	271	(4)	179	-----	419	896	476
Pennsylvania:									
1933.....	13	104	1, 332	167	738	15	1, 822	3, 400	1, 578
1931.....	18	(4)	1, 182	(4)	945	49	2, 097	4, 028	1, 931
Other States: <sup>12</sup>									
1933.....	20	95	1, 148	116	662	2	1, 366	2, 690	1, 324
1931.....	26	(4)	990	(4)	757	40	1, 723	3, 519	1, 797

<sup>1</sup> Not including proprietors and firm members, as follows: Leather, tanned, curried, and finished—1933, 91; 1931, no data; 1929, 93; 1927, 163. Belting and packing—1933, 54; 1931, no data; 1929, 94; 1927, 97. Boot and shoe findings—1933, 178; 1931, no data; 1929, 226; 1927, 255. Boots and shoes—1933, 327; 1931, no data; 1929, 466; 1927, 568. Pocketbooks—1933, 115; 1931, no data; 1929, 181; 1927, 205.

<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.

<sup>3</sup> Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.

<sup>4</sup> No data.

<sup>5</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Del., 9, 9; Ga., 2, 2; Minn., 3, 2; N. H., 4, 5; R. I., 1, 1; Tenn., 2, 4; Tex., 2, 2; Vt., 0, 1; Wash., 0, 1.

<sup>6</sup> Figures for 1931 withheld to avoid disclosing approximations of data for individual establishments; included in items for "Other States."

<sup>7</sup> Withheld to avoid disclosing compensation of individual employees; included in figure for "Other States."

<sup>8</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Colo., 2, 2; Del., 2, 2; Ga., 2, 3; Ill., 8, 10; Ky., 1, 2; La., 3, 4; Md., 2, 2; Minn., 3, 3; Miss., 0, 1; Nebr., 1, 1; N. H., 2, 2; N. J., 2, 7; N. C., 3, 4; R. I., 2, 3; S. C., 3, 3; Tenn., 3, 5; Tex., 3, 4; Va., 2, 2; Wash. (1931), 4; Wis., 3, 3.

<sup>9</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Calif., 2, 2; Conn., 3, 3; Del., 1, 1; Ga., 1, 1; Ill., 2, 4; Ky., 1, 1; Nebr., 1, 1; N. J., 2, 2; Pa., 8, 8; Tenn., 1, 0; Vt., 1, 2; Va., 1, 1.

<sup>10</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Conn., 4, 3; Del., 1, 1; Ga., 3, 4; La., 0, 1; Nebr., 2, 2; Oreg., 3, 1; R. I., 2, 0; Tex., 3, 4; Vt., 1, 1; Va., 6, 7; W. Va., 2, 2.

<sup>11</sup> Less than \$500.

<sup>12</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Conn., 2, 5; Fla., 1, 0; Iowa, 1, 0; Kans., 0, 1; Ky., 0, 1; Me., 2, 2; Md., 3, 5; Mich., 0, 1; N. C., 1, 0; R. I., 1, 2; Tex., 2, 3; Va., 2, 1; Wis., 5, 5.

TABLE 2.—LEATHER—PRODUCTION, BY KIND, QUANTITY, AND VALUE, 1933 AND 1931, AND BY KIND AND QUANTITY, 1929, FOR THE UNITED STATES

[This table does not include data for leather produced for manufacturers in other industries by establishments operating on a contract basis. See "Description of the industries," p. 381]

		1933	1931 Comparable with 1933 <sup>1</sup>	1931 As published
1. "Leather: Tanned, curried, and finished" industry, all products, total value.....		\$237,202,248		\$271,137,694
2. Leather.....		216,114,072	\$246,269,474	253,682,239
3. By-products of leather tanning.....		1,207,977	3,922,765	3,975,066
4. Other products (not normally belonging to the industry).....		3,522,350	1,267,490	1,508,383
5. Receipts for contract work.....		7,221,414	9,660,114	11,972,006
6. Leather, by-products, other products, and receipts for contract work, not reported separately (on abbreviated schedule) <sup>2</sup> .....		9,186,435		

  

	QUANTITY <sup>3</sup>				VALUE IN THOUSANDS OF DOLLARS <sup>4</sup>	
	1933 Reported on standard schedule <sup>5</sup>	1931 Comparable with 1933 <sup>1</sup>	1931 As published; comparable with 1929	1929	1933 Reported on standard schedule <sup>5</sup>	1931 Comparable with 1933 <sup>1</sup>
Leather:						
Aggregate value.....					216,114	246,269
Sole and belting leather, total value.....					60,551	74,579
Oak and union sole.....	<i>M backs, bends, and sides</i> 11,289	<i>M backs, bends, and sides</i> 11,570	<i>M backs, bends, and sides</i> 11,746	<i>M backs, bends, and sides</i> 13,750	38,484	54,293
Chrome and combination sole.....	559	414	447	596	1,988	1,996
Belting butts, rough and curried.....	<i>M butts and butt bends</i> 674	<i>M butts and butt bends</i> 621	<i>M butts and butt bends</i> 636	<i>M butts and butt bends</i> 1,375	5,165	5,542
Offal (heads, bellies, shoulders, etc.).....	<i>M pounds</i> 79,212	<i>M pounds</i> 85,025	<i>M pounds</i> 86,161	<i>M pounds</i> 94,643	14,914	12,748
Harness leather, total.....	<i>M sides</i> 408	<i>M sides</i> 314	<i>M sides</i> 375	<i>M sides</i> 745	1,951	1,846
Union black.....	119	58	96	284	504	364
Oak black and russet.....	289	256	279	461	1,446	1,482
Bag, case, and strap leather.....	537	725	787	1,055	2,504	3,397
Skirting leather.....	25	12	30	63	149	109
Collar leather.....	207	147	180	363	786	490
Lace leather.....	70	56	128	143	236	242
Welting leather.....	<i>M pounds</i> 1,819	<i>M pounds</i> 1,687	<i>M pounds</i> 2,077	<i>M pounds</i> ( <sup>6</sup> )	672	626
Upholstery leather <sup>7</sup> (automobile, furniture, and carriage):	<i>M hides</i>	<i>M hides</i>	<i>M hides</i>	<i>M hides</i>		
Whole-hide grains and machine- buffed.....	134	284	318	623	1,101	2,549
Splits (main and second).....	<i>M pieces</i> 279	<i>M pieces</i> 362	<i>M pieces</i> 410	<i>M pieces</i> 724	698	1,590
Upper leather (other than patent), total value.....					102,485	107,168
Cattle (including kip side).....	<i>M sides</i> 15,879	<i>M sides</i> 12,483	<i>M sides</i> 12,514	<i>M sides</i> 12,304	39,791	32,428

For footnotes, see end of table.

TABLE 2.—LEATHER—PRODUCTION, BY KIND, QUANTITY, AND VALUE, 1933 AND 1931, AND BY KIND AND QUANTITY, 1929, FOR THE UNITED STATES—Contd.

[See note at head of table]

	QUANTITY <sup>1</sup>				VALUE IN THOUSANDS OF DOLLARS <sup>2</sup>	
	1933	1931	1931	1929	1933	1931
	Reported on standard schedule <sup>3</sup>	Comparable with 1933 <sup>1</sup>	As published; comparable with 1929		Reported on standard schedule <sup>3</sup>	Comparable with 1933 <sup>1</sup>
Leather—Continued.						
Upper leather—Continued.						
Kip (except kip side).....	<i>M skins</i> 178	<i>M skins</i> 268	<i>M skins</i> 268	<i>M skins</i> 1,317	474	1,103
Calf.....	12,102	10,195	10,276	12,933	23,935	25,791
Goat and kid.....	38,114	34,978	34,978	50,149	30,875	37,285
Sheep and lamb (shoe stock) and cabretta.....	8,719	9,860	9,991	14,324	4,856	7,564
Horse, colt, ass, and mule: Half and whole fronts.....	<i>M equivalent half-fronts</i> 35	<i>M equivalent half-fronts</i> 84	<i>M equivalent half-fronts</i> 90	<i>M equivalent half-fronts</i> 116	64	240
Butts.....	<i>M equivalent butts</i> 271	<i>M equivalent butts</i>	<i>M equivalent butts</i>	<i>M equivalent butts</i>	300	625
Shanks.....	<i>M shanks</i> 160	<i>M shanks</i>	<i>M shanks</i>	<i>M shanks</i>	81	
Other, value.....					2,109	2,131
Patent leather (other than upholstery), total value.....	<i>M sides</i>	<i>M sides</i>	<i>M sides</i>	<i>M sides</i>	7,400	11,289
Cattle (including kip side).....	2,811	3,555	3,606	5,375	7,261	10,659
Other, value.....					139	630
Glove and garment leather, total value.....					17,609	15,303
Cattle grains (including foreign-tanned kip).....	365	96	96	( <sup>4</sup> )	996	270
Bellies, cowhide.....	<i>M bellies</i> 256	<i>M bellies</i> 387	<i>M bellies</i> 582	<i>M bellies</i> ( <sup>4</sup> )	162	391
Horse, colt, ass, and mule: Half and whole fronts.....	<i>M equivalent half-fronts</i> 1,269	<i>M equivalent half-fronts</i> 1,503	<i>M equivalent half-fronts</i> 1,509	<i>M equivalent half-fronts</i> 1,856	2,206	3,253
Butts and shanks, value.....					404	421
Sheep and lamb (except shearlings).....	<i>M skins</i> 12,190	<i>M skins</i> 8,214	<i>M skins</i> 9,039	<i>M skins</i> 5,618	7,586	6,407
Shearlings.....	1,562	1,371	2,000	3,027	1,414	1,322
Other, value.....					4,842	3,237
Fancy and bookbinders' leather, total value.....					5,170	9,935
Buffings (finished).....	<i>M hides</i> 1	<i>M hides</i> 1	<i>M hides</i> 41	<i>M hides</i> 97	13	9
Sheep and lamb and cabretta.....	<i>M skins</i> 2,114	<i>M skins</i> 2,807	<i>M skins</i> 2,814	<i>M skins</i> 3,972	2,043	2,987
Calf and kip.....	308	249	249	496	860	743
Goat and kid.....	118				239	
Other, value.....					2,016	6,196
Side splits (other than upholstery), finished.....	<i>Thousands</i> 17,795	<i>Thousands</i> 14,499	<i>Thousands</i> 14,772	<i>Thousands</i> 21,210	9,965	9,762
Other leather, <sup>5</sup> value.....					4,835	7,376

<sup>1</sup> See sec. 5c, p. 4. The figures given in this column represent the production, in 1931, of those classes of establishments (not in all cases the same individual establishments) that reported on the standard schedule for 1933.

<sup>2</sup> See sec. 5c, p. 4.

<sup>3</sup> See sec. 25, p. 13.

<sup>4</sup> No data.

<sup>5</sup> Exclusive of russet buffings. Figures for russet buffings are withheld to avoid disclosing output of individual establishments; value included in that of "Other leather," at end of table.

<sup>6</sup> Includes russet buffings. See footnote 5.

TABLE 3.—BELTING AND PACKING, LEATHER—PRODUCTION, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929

	1933	1931	1929
1. "Belting and packing, leather" industry, all products, total value.....	\$14, 879, 803	\$14, 521, 751	\$35, 631, 682
2.   Leather belting and packing.....	12, 718, 526	12, 286, 560	29, 224, 573
3.   Belt repairs (including rebuilding and reworking).....	222, 863	468, 421	1, 127, 295
4.   Other products (not normally belonging to the industry).....	1, 938, 414	1, 766, 770	5, 279, 814
5. Leather belting made as a secondary product in other industries.....	352, 184	460, 250	125, 130
Leather belting and packing, aggregate value (2 and 5).....	\$13, 070, 710	\$12, 746, 810	\$29, 349, 703
Flat belting:			
Quantity reported:			
Pounds.....	4, 290, 602	5, 548, 107	13, 051, 299
Value.....	\$6, 787, 557	\$8, 839, 401	\$23, 478, 916
Quantity not reported, value.....	\$1, 678, 115		
Belting, not specified as to kind, value.....	\$1, 170, 468	\$802, 811	\$2, 145, 077
Leather packing (cup, U, valve, oil-retainer-seal, etc.), value.....	\$3, 434, 570	\$3, 104, 598	\$3, 725, 710

TABLE 4.—BOOT AND SHOE FINDINGS—PRODUCTION, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1933 AND 1931

	VALUE	
	1933	1931
1. "Boot and shoe findings" industry, all products, total value.....	\$37, 013, 600	\$37, 366, 416
2.   Boot and shoe findings.....	35, 865, 136	36, 649, 650
3.   Other products (not normally belonging to the industry).....	775, 140	571, 464
4.   Receipts for contract work.....	373, 324	145, 302
5. Boot and shoe findings made as secondary products in other industries.....	3, 001, 794	1, 323, 828
6. Boot and shoe findings, aggregate value (2 and 5).....	38, 866, 930	37, 973, 478

	Census year	DOZEN PAIRS				Value
		Total	Cuban	Louis	Style not specified	
Boot and shoe findings.....	1933					\$38, 866, 930
	1931					37, 973, 478
Boot and shoe heels, total.....	1933					9, 499, 466
	1931					12, 850, 065
Wood-heel blocks made for sale as such:						
Quantity and style reported.....	1933	4, 794, 728	(1)	3, 066, 220	(1)	2, 310, 370
	1931	5, 459, 242	1, 972, 003	3, 003, 837	483, 402	4, 365, 697
Quantity and style not reported.....	1933					252, 298
Finished wood heels:						
Manufactured in plant:						
Quantity, style, and covering reported.....	1933	3, 308, 512	1, 419, 556	1, 440, 100	448, 856	4, 074, 389
	1931	2, 221, 368	887, 072	959, 379	374, 917	4, 185, 800
Leather-covered.....	1933	1, 729, 630	401, 165	943, 800	384, 665	2, 101, 784
	1931	1, 321, 319	480, 948	610, 435	229, 936	2, 424, 269
Celluloid-covered.....	1933	745, 177	261, 331	419, 655	64, 191	1, 015, 166
	1931	548, 046	312, 558	212, 841	22, 647	1, 086, 020
Fabric-covered.....	1933	185, 911	(1)	(1)		189, 233
	1931	182, 088	72, 845	108, 124	1, 119	261, 745
Other.....	1933	2 647, 794	(1)	(1)		2 768, 216
	1931	169, 915	20, 721	27, 979	121, 215	413, 776
Quantity, style, and covering not reported.....	1933					484, 295

For footnotes, see end of table.

TABLE 4.—BOOT AND SHOE FINDINGS—PRODUCTION, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1933 AND 1931—Continued

	Census year	DOZEN PAIRS				Value
		Total	Cuban	Louis	Style not specified	
Boot and shoe findings—Continued.						
Boot and shoe heels—Cont'd.						
Finished wood heels—Cont'd.						
Finished from purchased blocks:						
Quantity, style, and covering reported.....	1933	1,664,213	328,719	860,004	475,490	\$1,921,352
	1931	2,474,287	534,447	739,570	1,200,270	4,298,568
Leather-covered....	1933	854,539	( <sup>1</sup> )	480,180	( <sup>1</sup> )	974,953
	1931	1,333,463	285,364	339,021	709,078	2,335,382
Celluloid-covered....	1933	444,366	( <sup>1</sup> )	243,891	( <sup>1</sup> )	539,421
	1931	296,264	125,441	167,643	3,180	490,399
Fabric-covered.....	1933	136,546	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	152,756
	1931	561,297	93,727	114,450	353,120	904,390
Other.....	1933	228,762	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	254,222
	1931	283,263	29,915	118,456	134,892	568,397
Quantity, style, and covering not reported....	1933					456,762
Welting.....	1933					4,093,677
	1931					3,258,891
Other shoe findings.....	1933					25,273,787
	1931					21,864,522

<sup>1</sup> Withheld to avoid disclosing output of individual establishments.<sup>2</sup> Includes data for wood heels not reported by style or covering.

TABLE 5.—BOOTS AND SHOES—PRODUCTION, BY CLASS AND VALUE, FOR THE UNITED STATES: 1933 AND 1931

	1933	1931
1. "Boots and shoes, other than rubber" industry, all products, total.....	\$553,425,166	\$653,879,746
2. Boots, shoes, slippers, other footwear, leggings, puttees, etc.....	552,133,230	652,544,848
3. Other products (not normally belonging to the industry).....	321,116	639,732
4. Receipts for contract work.....	970,820	695,166
5. Boots, shoes, slippers, other footwear, leggings, etc., made as secondary products in other industries.....	502,847	558,897
Boots and shoes, etc., aggregate value (2 and 5).....	552,636,077	653,103,745
Boots, shoes, and slippers.....	546,166,600	647,113,651
Moccasins.....	2,071,595	1,885,971
Other footwear <sup>1</sup> .....	2,790,784	2,145,413
Leggings, overgaiters, puttees, etc.....	1,607,098	1,958,710

<sup>1</sup> Principally sandals, ballet slippers, and wood-soled shoes made in the boot and shoe industry, and footwear not reported in detail, made as secondary products by establishments engaged primarily in other lines of manufacture.



TABLE 6.—BOOTS, SHOES, AND SLIPPERS—PRODUCTION, BY KIND, METHOD OF MANUFACTURE, NUMBER, AND VALUE, FOR THE UNITED STATES: 1933 AND 1931

Census year	TOTAL		NUMBER OF PAIRS, BY METHOD OF MANUFACTURE					
	Value	Number of pairs	Wetted	McKay	Turned	Wood or metal fas- tened	Stitchdown	Cemented
1933	\$546,166,600	349,346,199	100,743,949	93,360,688	32,256,678	25,983,765	56,939,896	40,061,283
1931	647,113,651	316,057,030	98,203,923	104,464,260	38,513,427	17,955,662	46,006,378	10,913,350
1933	523,134,921	313,613,741	99,731,705	88,648,868	13,166,144	25,983,765	48,908,237	37,475,022
1931	620,687,633	281,578,962	97,733,212	99,292,560	17,554,240	17,955,662	39,100,793	9,942,496
1933	515,776,142	309,142,728	99,698,736	86,512,393	12,519,393	25,962,285	48,441,910	36,098,011
1931	610,185,149	276,855,265	97,654,359	95,887,833	16,622,653	17,955,662	39,077,106	9,942,496
1933	511,686,852	307,015,869	99,073,112	85,354,429	12,519,393	25,962,285	148,441,910	35,719,843
1931	600,761,436	272,518,892	96,944,912	93,350,013	11,622,653	17,955,662	39,077,106	9,942,496
1933	174,932,851	88,655,610	61,148,790	5,182,820	(2)	19,180,286	3,011,833	(2)
1931	203,502,924	79,152,244	57,469,868	3,427,140	(2)	14,038,437	4,203,965	(2)
1933	22,966,485	17,276,784	6,485,069	3,508,350	(2)	6,625,563	625,285	(2)
1931	31,112,049	19,525,765	8,155,477	3,150,297	(2)	3,843,468	4,374,493	(2)
1933	251,702,779	133,660,934	20,326,435	64,045,843	7,336,548	118,222	5,920,562	35,390,274
1931	295,067,637	115,260,759	19,933,558	75,474,817	8,333,214	(2)	(2)	8,345,128
1933	49,950,822	49,339,339	6,599,803	11,220,318	1,283,515	38,214	20,012,582	284,907
1931	57,347,332	42,351,627	9,103,283	10,272,393	2,105,095	(2)	(2)	(2)
1933	12,133,915	16,053,202	4,012,965	1,394,098	(2)	(2)	8,956,484	(2)
1931	13,731,494	16,230,697	2,282,726	1,025,361	(2)	(2)	(2)	(2)
1933	4,088,290	2,126,859	625,624	1,157,964	(2)	(2)	(2)	288,668
1931	9,423,713	4,336,373	709,447	2,537,920	(2)	(2)	(2)	(2)
1933	1,874,486	818,208	524,201	257,973	(2)	(2)	(2)	(2)
1931	2,931,107	952,061	371,121	331,443	(2)	(2)	(2)	(2)
1933	2,214,804	1,308,651	101,423	899,991	(2)	(2)	(2)	288,668
1931	6,492,606	3,834,312	333,326	2,206,377	(2)	(2)	(2)	(2)
1933	7,388,779	4,471,013	32,969	2,136,475	646,751	21,430	166,327	1,467,011
1931	10,502,484	4,723,697	78,853	3,404,727	931,837	(2)	23,687	284,843
1933	38,588	18,000	2,680	(2)	5,900	9,420	(2)	(2)
1931	396,002	164,602	21,132	78,186	(2)	(2)	(2)	(2)
1933	7,350,191	4,453,013	30,289	2,136,475	640,851	12,060	166,327	1,467,011
1931	10,106,482	4,599,096	57,721	3,329,541	(2)	(2)	(2)	(2)

Slippers for house wear, total	1933 1931	25,031,679 26,426,018	35,732,458 34,478,068	1,012,244 470,711	4,711,820 5,171,730	10,090,524 20,856,187	8,331,509 6,903,585	2,586,261 970,855
All-leather, total	1933 1931	9,032,208 14,031,608	10,520,648 13,730,761	1,012,244 330,533	1,690,471 2,161,152	4,792,768 9,457,328	915,876 893,277	2,139,289 888,671
Men's, youths', and boys'	1933 1931	4,107,967 4,631,823	3,754,935 3,982,698	(?) (?)	798,494 1,135,019	1,280,635 2,142,734	(?) (?)	203,472 122,811
Women's and misses'	1933 1931	5,824,241 9,309,845	6,765,713 9,748,063	(?) (?)	861,977 1,025,253	3,512,734 7,314,594	(?) (?)	1,845,817 1,765,860
Other than all-leather, total	1933 1931	13,099,471 12,394,350	25,211,810 20,747,307	140,378	3,051,349 3,010,578	14,297,766 11,501,859	7,415,723 6,012,308	446,972 82,184
Men's	1933 1931	2,665,587 3,208,346	4,088,849 4,874,078	(?)	801,209 1,205,413	2,602,088 2,769,094	(?) (?)	(?) (?)
Women's	1933 1931	10,433,884 9,186,004	21,122,961 15,873,229	(?)	2,260,140 1,806,165	11,695,678 8,732,765	(?) (?)	(?) (?)

<sup>1</sup> Includes data for athletic and sporting shoes. See footnote 3.

<sup>2</sup> Withheld from publication to avoid disclosing approximations of data for individual establishments.

<sup>3</sup> Figures for "Athletic and sporting" included in these for "Other than athletic and sporting shoes, total," to avoid disclosing approximations of production of individual establishments.

TABLE 7.—WAGE EARNERS, BY QUARTERS, FOR SELECTED STATES: 1933 AND 1931

[The average for the year (table 1) differs from the average of the quarterly figures below. (See fourth sentence sec. 13, p. 8.) See sec. 26, p. 13]

	1933 <sup>1</sup>				1931			
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
<b>LEATHER: TANNED, CURRIED, AND FINISHED</b>								
United States.....	38,611	44,425	49,458	48,716	42,665	42,641	42,748	39,025
States								
California.....	394	573	600	516	405	384	384	376
Connecticut.....	155	197	213	160	145	142	136	140
Delaware.....	2,401	2,552	3,045	3,029	2,104	1,926	1,992	1,829
Illinois.....	2,949	3,403	3,835	3,844	3,413	3,624	3,702	3,243
Indiana.....	274	305	358	386	289	267	262	227
Kentucky.....	450	441	548	532	440	469	467	394
Maine.....	59	76	102	98	92	83	71	75
Maryland.....	467	493	509	525	557	571	559	530
Massachusetts.....	8,803	10,880	11,099	10,318	8,976	8,989	8,880	7,484
Michigan.....	1,989	2,398	2,870	3,247	2,153	1,915	1,847	1,923
Minnesota.....	221	263	353	344	(2)	(2)	(2)	(2)
Missouri.....	208	221	256	234	224	257	258	261
New Hampshire.....	389	418	453	426	360	388	402	369
New Jersey.....	1,890	2,309	2,584	2,618	3,469	3,427	3,262	3,144
New York.....	4,221	4,844	5,392	4,877	4,549	4,716	4,879	4,760
North Carolina.....	796	823	1,038	1,116	1,014	1,072	983	935
Ohio.....	1,214	1,356	1,480	1,554	1,325	1,372	1,376	1,364
Oregon.....	14	16	22	22	28	31	27	25
Pennsylvania.....	6,927	7,666	8,090	8,594	8,015	8,008	8,129	7,111
Virginia.....	496	478	558	634	572	540	567	545
West Virginia.....	783	801	883	907	876	768	720	728
Wisconsin.....	2,901	3,216	3,798	3,954	2,919	2,919	3,044	2,826
<b>BOOT AND SHOE FINDINGS</b>								
United States.....	9,628	10,417	11,249	9,587	9,930	8,905	9,981	7,653
States								
Connecticut.....	276	348	480	449	234	257	244	249
Maine.....	186	226	185	156	233	203	213	157
Massachusetts.....	4,956	5,217	5,684	4,885	4,014	4,040	4,744	3,481
Missouri.....	358	951	986	873	908	915	982	764
New Hampshire.....	747	761	816	567	879	829	893	699
New York.....	1,092	1,338	1,362	1,104	1,271	1,088	1,221	1,014
Ohio.....	330	330	387	291	304	240	300	217
Pennsylvania.....	194	200	223	203	364	346	351	315
Rhode Island.....	150	157	192	176	177	148	157	133
Wisconsin.....	249	290	310	259	187	183	215	149
<b>BOOTS AND SHOES, OTHER THAN RUBBER</b>								
United States.....	187,342	194,246	202,357	174,369	191,281	181,289	194,970	156,654
States								
California.....	549	600	755	507	465	447	476	392
Connecticut.....	510	696	731	466	427	608	683	622
Georgia.....	1,310	1,322	1,500	990	769	791	674	702
Illinois.....	14,846	16,158	17,382	15,588	13,426	14,287	14,580	12,919
Indiana.....	1,786	2,047	2,122	1,687	1,514	1,422	1,521	1,321
Iowa.....	304	319	324	256	257	227	257	226
Kansas.....	37	36	35	40	69	72	69	66
Kentucky.....	1,079	1,418	1,578	1,041	1,544	1,274	1,161	1,032
Maine.....	11,710	12,116	12,896	9,881	9,746	9,531	9,672	7,255
Maryland.....	2,646	2,376	2,270	2,447	2,403	2,359	2,376	2,084
Massachusetts.....	46,242	48,684	47,620	39,228	52,342	46,977	52,290	37,988
Michigan.....	618	727	751	719	697	660	682	679
Minnesota.....	540	831	1,000	588	760	615	752	621
Missouri.....	21,535	21,890	23,952	21,447	20,766	20,432	21,606	17,097
New Hampshire.....	11,937	11,371	12,470	10,021	15,167	13,934	15,068	10,869
New Jersey.....	1,268	1,521	1,435	1,004	1,026	1,181	1,317	941
New York.....	33,461	34,967	33,909	32,821	35,277	33,283	35,394	30,630
Ohio.....	10,942	10,726	12,260	10,523	11,134	10,804	11,487	9,546
Oregon.....	17	21	30	26	(2)	(2)	(2)	(2)
Pennsylvania.....	10,158	10,066	10,569	9,803	9,814	8,631	9,861	8,417
Tennessee.....	2,277	2,644	3,450	3,094	1,968	2,138	2,394	2,127
Texas.....	46	73	91	96	92	93	95	90
Virginia.....	3,112	2,970	3,383	2,243	1,523	1,552	1,669	1,281
Washington.....	34	48	59	56	51	50	55	54
Wisconsin.....	9,687	10,057	11,178	9,368	9,526	9,474	10,320	9,298

For footnotes, see end of table.

TABLE 7.—WAGE EARNERS, BY QUARTERS, FOR SELECTED STATES: 1933 AND 1931—Continued

[See note at head of table]

	1933 <sup>1</sup>				1931			
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
POCKETBOOKS, PURSES, AND CARD-CASES								
United States.....	6,994	7,121	10,437	7,751	8,975	7,737	10,321	7,847
<i>States</i>								
California.....	39	70	84	55	78	62	76	49
Illinois.....	293	338	466	316	364	329	432	224
Maryland.....	82	124	135	118	205	160	213	162
Massachusetts.....	1,334	1,201	2,090	1,193	1,076	1,020	1,533	947
Missouri.....	38	55	77	57	72	114	143	108
New Jersey.....	405	613	526	268	356	454	432	302
New York.....	2,773	2,404	4,057	3,248	4,644	3,407	4,827	3,898
Ohio.....	52	47	139	41	279	239	285	252
Pennsylvania.....	1,179	1,204	1,592	1,297	1,085	1,138	1,489	1,131
Wisconsin.....	258	235	483	552	409	347	413	414

<sup>1</sup> See sec. 5, p. 4, and sec. 13, p. 8. The establishments canvassed with the standard schedule reported wage earners, by months, as follows:

*Leather: Tanned, curried, etc.*—Number of establishments reported on standard schedule, 286.

January.....	36,855	May.....	33,586	September.....	46,837
February.....	38,092	June.....	42,070	October.....	45,992
March.....	36,808	July.....	44,616	November.....	45,587
April.....	33,866	August.....	46,998	December.....	46,251

*Boot and shoe findings.*—Number of establishments reported on standard schedule, 299.

January.....	9,049	May.....	9,954	September.....	11,035
February.....	9,817	June.....	10,201	October.....	10,333
March.....	9,405	July.....	11,064	November.....	9,466
April.....	9,380	August.....	11,444	December.....	9,412

*Boots and shoes.*—Number of establishments reported on standard schedule, 820.

January.....	164,994	May.....	178,872	September.....	189,764
February.....	178,283	June.....	182,164	October.....	185,894
March.....	175,748	July.....	192,873	November.....	164,444
April.....	176,248	August.....	197,190	December.....	163,709

*Pocketbooks, purses, and cardcases.*—Number of establishments reported on standard schedule, 188.

January.....	6,376	May.....	8,285	September.....	10,154
February.....	7,071	June.....	6,903	October.....	10,012
March.....	6,803	July.....	5,511	November.....	9,208
April.....	7,967	August.....	8,637	December.....	7,488

<sup>1</sup> Withheld to avoid disclosing data for individual establishments.

## Group 10.—STONE, CLAY, AND GLASS PRODUCTS

### THE GROUP AS A WHOLE

[See p. 39]

The industries in Group 10 derive their principal materials from the earth in the form of stone, clay, and sand, and the group is constituted on the basis of this similarity in regard to source of materials rather than on any similarity in the character or uses of the finished products.

In several of the industries in this group—namely, "Cement," "Clay products," "Lime," "Marble, granite, slate, and other stone products," and "Pottery"—both mining or quarrying operations and manufacturing are in some cases carried on by the same establishment. As such establishments usually keep only single sets of books, and as the same employees are sometimes engaged in both lines of work, it is not always possible to separate the data for mining or quarrying from those for manufacturing.

Group 10 has been divided into three subgroups, namely, (1) industries in which stone is the principal material; (2) those in which clay is the principal material; and (3) the "Glass" industry and those industries which use glass as their principal material. The classification of a few industries is necessarily rather arbitrary. For example: Plaster and stone as well as clay are used in the manufacture of statuary and art goods.

## SUMMARY FOR GROUP 10.—STONE, CLAY, AND GLASS PRODUCTS: 1927 to 1933

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>1</sup>
Aggregate for the group.	1933	4,528	173,000	\$142,141,636	\$212,154,614	\$608,690,486	\$396,544,872
	1931	6,408	222,856	248,859,500	316,408,149	925,318,329	608,850,180
	1929	8,514	328,417	432,817,393	526,339,979	1,501,414,590	1,035,074,611
	1927	8,673	350,017	464,272,991	594,774,314	1,612,548,768	1,017,774,451
<b>Industries using stone as a material, total.</b>	1933	2,516	58,226	51,874,698	91,735,686	201,043,959	169,308,273
	1931	3,762	84,787	107,105,021	165,666,416	463,440,519	297,774,103
	1929	5,146	116,411	171,789,939	268,245,775	751,210,410	482,964,685
	1927	5,156	126,569	187,878,839	303,631,823	787,543,224	484,211,401
Abrasive wheels, stones, paper, and cloth, and related products. <sup>2</sup>	1933	77	4,890	4,980,561	11,348,697	*30,158,941	18,810,244
	1931	73	4,614	5,540,243	11,727,464	31,646,800	19,919,336
Asbestos products other than steam packing and pipe and boiler covering.	1933	58	6,084	5,074,645	10,788,515	25,254,604	14,466,089
	1931	67	6,009	6,451,954	13,837,404	35,174,002	21,336,598
	1929	67	8,092	10,776,712	25,408,002	56,164,036	30,756,034
	1927	62	6,337	8,375,502	21,517,740	44,156,388	22,638,648
Cement.....	1933	148	15,829	13,869,605	26,931,839	86,921,018	59,989,179
	1931	164	24,317	29,833,507	56,097,888	148,845,075	92,747,187
	1929	174	33,368	48,849,096	95,242,497	267,509,260	172,206,763
	1927	161	36,322	53,110,745	120,012,025	293,565,293	173,553,268
Concrete products.....	1933	766	4,422	3,592,437	9,288,863	20,537,942	11,249,079
	1931	1,432	9,253	10,727,729	22,372,872	53,191,710	30,818,838
	1929	2,438	16,505	22,688,062	34,035,184	92,900,749	58,805,565
	1927	2,330	17,808	24,897,709	33,913,086	93,259,206	59,346,120
Emery wheels and other abrasive and polishing appliances. <sup>3</sup>	1929	67	3,873	5,820,143	12,416,663	32,154,311	19,737,648
	1927	68	3,261	4,008,187	10,839,973	24,181,837	13,341,864
Grindstones, pulpstones, and millstones. <sup>4</sup>	1927	23	468	559,510	287,829	1,620,697	1,362,868
Hones, whetstones, and similar products. <sup>5</sup>	1929	6	174	182,155	340,669	868,811	528,142
Lime.....	1933	167	5,972	4,079,429	6,543,163	16,200,313	9,657,150
	1931	208	6,706	6,012,411	8,895,504	22,199,792	13,304,288
	1929	237	8,554	9,476,314	13,907,760	35,815,658	21,907,898
	1927	260	10,903	12,190,918	17,269,467	41,587,458	24,317,991
Marble, granite, slate, and other stone products.	1933	1,129	16,541	16,759,965	17,776,609	55,040,674	37,264,065
	1931	1,588	27,700	41,650,574	34,405,109	119,395,105	84,989,996
	1929	1,881	37,817	63,040,864	57,637,838	192,163,916	134,526,078
	1927	1,978	40,474	68,490,655	66,328,245	201,181,281	134,853,033
Sand-lime brick.....	1933	10	84	61,064	74,039	205,129	131,090
	1931	31	322	356,853	461,418	1,267,838	806,120
	1929	40	566	776,202	944,534	2,970,923	2,026,389
	1927	45	790	1,051,495	1,157,965	3,616,456	2,458,491
Wall board, insulating board, gypsum and other plasters, and floor composition.	1933	161	4,404	3,456,992	8,983,961	26,725,338	17,741,377
	1931	204	5,866	6,481,756	17,868,757	51,720,497	33,851,740
	1929	236	7,462	10,180,391	28,312,628	70,662,746	42,350,118
	1927	221	10,014	14,411,777	31,998,385	83,856,008	51,857,623
<b>Industries using clay as a material, total.</b>	1933	1,374	58,456	39,485,881	38,424,204	122,830,555	84,406,351
	1931	1,807	80,969	75,223,029	59,977,302	209,286,121	149,308,819
	1929	2,370	133,668	158,475,816	122,822,579	441,269,877	318,447,298
	1927	2,598	148,850	182,466,053	156,263,845	488,558,687	332,294,842
China firing and decorating, not done in potteries.	1933	14	152	127,449	377,902	761,718	383,816
	1931	21	220	235,832	506,885	1,127,619	576,734
	1929	27	317	420,303	640,361	1,554,003	913,642
	1927	31	366	428,232	681,653	1,692,079	1,010,426
Clay products (other than pottery) and nonclay refractories.	1933	928	31,944	18,966,972	19,993,771	64,603,242	44,609,471
	1931	1,264	51,128	44,368,195	26,968,681	127,335,611	90,366,930
	1929	1,760	93,657	107,348,468	82,734,156	297,879,237	215,145,081
	1927	1,857	101,230	122,311,059	100,641,824	321,889,978	221,248,154

For footnotes, see end of table.

SUMMARY FOR GROUP 10.—STONE, CLAY, AND GLASS PRODUCTS: 1927 TO 1933—  
Continued

INDUSTRY	Cen- sus year	Num- ber of estab- lish- ments	Wage earners (aver- age for the year)	Wages	Cost of ma- terials, con- tainers, fuel, and pur- chased elec- tric energy	Value of products	Value added by manu- facture <sup>1</sup>
Graphite, ground and refined.	1933	10	168	\$146,320	\$762,878	\$1,489,610	\$726,732
	1931	9	183	183,040	975,974	1,061,920	985,946
	1929	11	494	627,235	1,457,860	3,759,969	2,302,109
	1927	13	289	340,510	1,319,161	2,931,584	1,612,423
Minerals and earths, ground or otherwise treated. <sup>2</sup>	1933	107	1,874	1,564,546	4,389,305	9,684,088	5,294,783
	1931	88	1,090	1,126,538	3,817,099	7,294,967	3,477,868
	1929	88	1,679	2,187,923	8,937,883	17,409,056	8,471,173
Pottery, including porce- lain ware.	1933	231	23,632	17,891,383	12,178,939	43,717,679	31,538,740
	1931	275	27,023	26,981,468	16,893,292	65,866,119	49,472,827
	1929	313	35,409	43,655,980	27,007,364	110,622,453	83,615,089
	1927	316	36,667	45,149,818	33,580,795	110,597,338	77,016,543
Statuary and art goods (ex- cept concrete), factory production.	1933	84	686	789,211	721,409	2,574,218	1,852,809
	1931	150	1,325	2,327,956	1,271,371	5,699,885	4,428,514
	1929	171	2,112	4,235,907	2,044,955	10,045,159	8,000,204
	1927	136	2,028	4,403,742	2,414,919	10,187,247	7,772,328
Glass and manufac- tures of glass, total.	1933	638	56,317	50,781,057	81,994,724	224,824,972	142,830,248
	1931	839	57,100	66,531,450	90,824,431	252,591,689	161,767,258
	1929	998	78,338	102,551,638	135,271,625	368,934,303	233,662,678
	1927	919	74,598	93,928,099	134,878,646	336,146,854	201,268,208
Glass.....	1933	213	49,797	45,221,754	63,409,894	191,947,716	128,537,822
	1931	229	49,917	57,881,550	73,574,568	216,264,830	142,600,262
	1929	263	67,527	87,795,111	103,293,943	303,818,560	200,524,617
	1927	269	65,825	81,352,734	109,911,464	282,394,330	172,482,866
Mirrors and other glass prod- ucts made of purchased glass.	1933	425	6,520	5,559,303	18,584,830	32,877,256	14,292,426
	1931	610	7,183	8,049,900	17,249,863	36,326,859	19,076,996
	1929	735	10,811	14,756,527	31,977,682	65,115,743	33,138,061
	1927	660	8,773	12,576,865	24,967,182	53,762,524	28,785,342

<sup>1</sup> Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.<sup>2</sup> No comparable figures for years prior to 1931.<sup>3</sup> Abandoned as a separate industry classification; now included in "Abrasive wheels, stones, paper, and cloth, and related products."<sup>4</sup> Abandoned as a manufacturing industry; now treated as a quarrying operation.<sup>5</sup> No comparable figures available for 1927.

\* Abrasive grinding wheels, \$10,285,415; artificial abrasive sticks, stones, and bricks, \$833,272; oilstones, scythestones, and other whetstones, hones, and rubbing stones, \$286,812; abrasive paper and cloth, 765,392 reams, \$9,740,287; buffing and polishing wheels, \$1,908,296; other products, \$7,104,859.

# ASBESTOS PRODUCTS; STEAM AND OTHER PACKING, PIPE AND BOILER COVERING, AND GASKETS

[A preliminary report for these industries was issued on Oct. 16, 1934]

**Description of the industries.**—This report covers two closely related and overlapping industries, namely (1) "Asbestos products other than steam packing and pipe and boiler covering" and (2) "Steam and other packing, pipe and boiler covering, and gaskets, not elsewhere classified," Group 16. The products of the first industry comprise asbestos textiles, asbestos building materials, and other commodities composed wholly or chiefly of asbestos, not including steam and other packing, pipe and boiler covering, and gaskets. Establishments classified in the secondary industry are engaged primarily in the manufacture of packing for steam, water, and other pipe joints, and for engines, air compressors, etc.; insulating materials for covering boilers and pipes; and gaskets made of fiber, of paper, or of any combination of materials. Manufacturers whose principal products are (a) cork gaskets, or (b) rubber gaskets, or (c) leather gaskets, are classified in (a) the "Cork products" industry, or (b) the "Rubber goods other than tires, inner tubes, and boots and shoes" industry, or (c) the "Leather goods not elsewhere classified" industry, as the case may be; but an establishment which makes two or more classes of gaskets is assigned to the "Steam and other packing, pipe and boiler covering, and gaskets, not elsewhere classified" industry. The total value of all gaskets manufactured, so far as separately reported to the Bureau of the Census, is given in table 2.

**Extent of coverage.**—The census coverage of these industries was practically complete. Only 1 establishment in the "Asbestos-products" industry and only 3 in the "Steam and other packing," etc., industry that had reported for 1931 failed to supply information in regard to their status (active, idle, etc.) or their activities in 1933, and the number of wage earners employed and the values of products made by these establishments in 1931 were insignificant in comparison with the respective industry totals.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931

[See sec. 26, p.13]

	Number of establishments	Number of salaried employees <sup>1 2</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
Thousands of dollars. (See sec. 25, p. 13)								
ASBESTOS PRODUCTS OTHER THAN STEAM PACKING AND PIPE AND BOILER COVERING								
United States								
1933.....	58	898	6,084	1,626	5,075	10,789	25,255	14,466
1931.....	67	(4)	6,009	(4)	6,452	13,837	35,174	21,337
1929.....	67	1,136	8,092	3,120	10,777	25,408	56,164	30,756
1927.....	62	757	6,337	2,081	8,376	21,518	44,156	22,639

For footnotes, see end of table.



TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1,2</sup>	Number of wage earners (average for the year)	Salaries <sup>3</sup>	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>4</sup>
Thousands of dollars. (See sec. 25, p. 13)								
<i>States</i>								
New Jersey: 1933 <sup>5</sup> .....	6	165	1,463	341	1,236	2,628	5,663	3,036
New York: 1933.....	4	7	41	8	33	103	208	105
1931.....	4	(*)	38	(*)	41	127	259	132
North Carolina: 1933.....	5	28	334	45	213	560	995	435
1931.....	5	(*)	228	(*)	199	527	1,074	547
Pennsylvania: 1933.....	6	127	785	180	633	989	2,625	1,636
1931.....	7	(*)	773	(*)	766	1,035	3,413	2,378
Other States: <sup>6</sup> 1933.....	37	571	3,461	1,052	2,959	6,508	15,763	9,256
1931.....	51	(*)	4,970	(*)	5,446	12,149	30,429	18,280
STEAM AND OTHER PACKING, PIPE AND BOILER COVERING, AND GASKETS, NOT ELSEWHERE CLASSIFIED								
<i>United States</i>								
1933.....	129	962	4,575	1,533	4,006	9,183	20,275	11,092
1931.....	141	(*)	4,705	(*)	5,174	11,297	25,401	14,103
1929.....	171	1,392	7,266	4,133	9,660	21,566	45,433	23,837
1927.....	159	1,533	5,946	4,237	7,905	19,794	43,045	23,250
<i>States</i>								
California: 1933.....	10	27	138	46	168	226	569	343
1931.....	12	(*)	127	(*)	178	313	854	541
Illinois: 1933.....	18	203	814	283	640	1,761	4,085	2,325
1931.....	18	(*)	737	(*)	762	1,599	4,507	2,908
Massachusetts: 1933.....	8	37	79	52	79	197	555	358
1931.....	7	(*)	97	(*)	146	215	638	424
Michigan: 1933.....	9	53	650	88	539	1,712	3,297	1,585
1931.....	9	(*)	527	(*)	579	1,039	3,683	1,743
New Jersey: 1933.....	9	39	110	90	106	326	714	388
1931.....	10	(*)	149	(*)	247	516	992	476
New York: 1933.....	24	119	576	189	569	1,460	3,171	1,710
1931.....	31	(*)	693	(*)	815	1,654	3,329	1,676
Ohio: 1933.....	11	22	105	30	90	171	397	226
1931.....	10	(*)	96	(*)	111	195	480	286
Pennsylvania: 1933.....	18	300	1,073	601	978	1,854	4,172	2,318
1931.....	21	(*)	971	(*)	1,052	2,675	5,478	2,803
Other States: <sup>7</sup> 1933.....	22	102	1,030	154	838	1,475	3,314	1,839
1931.....	23	(*)	1,308	(*)	1,283	2,192	5,440	3,248

<sup>1</sup> Not including proprietors and firm members, as follows: Asbestos products, etc.—1933, 6; 1931, no data; 1929, 9; 1927, 9; Steam and other packing, etc.—1933, 28; 1931, no data; 1929, 55; 1927, 89.

<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.

<sup>3</sup> Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.

<sup>4</sup> No data.

<sup>5</sup> Figures for 1931 withheld to avoid disclosing approximations of data for individual establishments; included in items for "Other States."

<sup>6</sup> States included and number of establishments reporting for 1933 and 1931, respectively, are: Calif., 4; 7; Conn., 4, 4; Ill., 6, 7; Ind., 2, 2; La., 2, 2; Mass., 4, 4; Mich., 2, 3; Mo., 3, 5; N. H., 2, 2; N. J. (1931), 6; Ohio, 6, 8; Oreg., 1, 0; S. C., 1, 1.

<sup>7</sup> States included and number of establishments reporting for 1933 and 1931, respectively, are: Ala., 1, 2; Colo., 1, 2; Conn., 1, 1; Ga., 1, 1; Ind., 5, 6; Ky., 1, 1; La., 1, 1; Md., 1, 0; Minn., 1, 1; Mo., 2, 2; Nebr., 1, 1; Oreg., 2, 2; Wash., 1, 1; W. Va., 1, 0; Wis., 2, 2.

TABLE 2.—PRODUCTS BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929

	QUANTITY IN THOUSANDS OF UNITS AS SPECIFIED <sup>1</sup>			VALUE IN THOUSANDS OF DOLLARS <sup>1</sup>		
	1933	1931	1929	1933	1931	1929
1. "Asbestos products other than steam packing and pipe and boiler covering" and "Steam and other packing, pipe and boiler covering, and gaskets, not elsewhere classified" industries, all products, total value.....				45,520	60,575	101,597
2. Asbestos products, steam and other packing, pipe and boiler covering, and gaskets.....				39,983	54,053	96,921
3. Other products (not normally belonging to the industries).....				5,194	6,396	4,517
4. Receipts for contract and custom work.....				352	125	159
5. Asbestos products, steam and other packing, pipe and boiler covering, and gaskets, made as secondary products in other industries, value.....				8,489	7,885	10,440
Asbestos products, steam and other packing, pipe and boiler covering, and gaskets, aggregate value (2 and 5).....				48,472	61,938	107,361
Asbestos textiles and textile products, total value.....				12,623	18,539	36,162
Brake lining not molded..... M ft. <sup>2</sup>	35,472	56,060	110,246	4,545	8,367	16,447
Clutch facings..... M pieces	18,858	21,341	38,096	1,602	1,797	3,911
Yarn..... M lb.	8,487	9,513	15,378	1,552	2,471	5,174
Cloth..... M lb.	4,649	4,629	6,667	1,070	1,414	2,767
Tape, listings, and tubular lagging..... M lb.	1,736	2,351	2,226	581	881	1,202
Packing..... M lb.	4,971	6,747	8,623	1,884	2,334	3,846
Gaskets..... M lb.	1,400	1,441	3,012	577	644	1,727
Other asbestos textiles, and textile products.....				813	651	1,088
Asbestos building materials, total value.....				3,479	5,648	10,424
Asbestos shingles..... M sq.	408	566	894	1,826	3,266	5,277
Asbestos lumber..... M sq. ft.	14,194	16,908	35,395	1,082	1,563	3,094
Other asbestos building materials <sup>2</sup> .....				621	818	2,052
Asbestos products other than textiles, textile products, and building materials.....				14,400	17,442	27,931
Molded asbestos brake lining..... M ft.	24,374	24,180	22,411	3,423	2,824	2,535
Asbestos brake lining not reported by quantity or by kind (i. e. molded or not molded) <sup>4</sup> .....				3,270	3,116	5,485
Pipe and boiler covering, air-cell asbestos..... M lin. ft.	10,554	39,084	67,331	1,137	2,755	4,658
Pipe and boiler covering, asbestos, other than air-cell..... M lin. ft.	8,461	8,798	27,687	852	938	2,516
Pipe and boiler covering, 85 percent magnesia..... M lin. ft.	10,818	19,323	23,959	1,457	2,512	3,045
Molded blocks, 85 percent magnesia..... M bd. ft.	9,711	11,741	21,479	853	1,209	2,457
Asbestos insulating cement..... M lb.	35,856	39,100	71,198	630	603	1,018
Other asbestos products <sup>3</sup> .....				2,778	3,485	6,218
Gaskets other than asbestos-textile <sup>4</sup> .....				9,005	10,153	15,742
Metallic and semimetallic packing.....				1,845	2,111	3,067
Steam and other packing, not including asbestos-textile, metallic, or semimetallic <sup>5</sup> .....				5,404	5,172	11,658
Mineral-wool products.....				<sup>6</sup> 1,714	2,873	2,377

<sup>1</sup> See sec. 25, p. 13.<sup>2</sup> Figures for molded asbestos brake lining and for asbestos brake lining not reported by kind (i. e., molded or not molded) are given under the heading "Asbestos products other than textiles," etc.<sup>3</sup> Asbestos flexible roofing and miscellaneous asbestos building materials. Values combined to avoid disclosing output of individual establishments.<sup>4</sup> Figures for brake lining, not molded, are given under the heading "Asbestos textiles and textile products."<sup>5</sup> Asbestos paper, asbestos millboard, and miscellaneous asbestos products. Values combined to avoid disclosing approximations of the output of individual establishments.<sup>6</sup> See "Description of the industries," p. 399, last sentence.<sup>7</sup> Includes leather packing made by establishments classified in the leather-belt industry: For 1933, \$3,141,147; for 1931, \$2,900,001; for 1929, \$3,725,710.<sup>8</sup> Incomplete.

# CEMENT

[A preliminary report for this industry was issued on Oct. 16, 1934]

**Description of the industry.**—This industry consists in the manufacture of hydraulic cement from rock usually quarried by the manufacturing establishments. The principal product is portland cement, but small quantities of natural, puzzolan, and masonry cements are also manufactured.

**Extent of coverage.**—The 1933 coverage of establishments reporting in this industry for 1931 was practically complete. Of the 164 such establishments, only 1 failed to supply any information in regard to its status (active, idle, etc.) or its activities in 1933, and this establishment accounted for only a very small fraction of 1 percent of the total number of wage earners and the total value of products reported for the industry.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
<i>Thousands of dollars. (see sec. 25, p. 13)</i>								
<i>United States</i>								
1933.....	148	2, 048	15, 829	4, 410	13, 870	26, 932	4 86, 921	59, 989
1931.....	164	( <sup>o</sup> )	24, 317	( <sup>o</sup> )	20, 884	56, 098	4 148, 845	92, 747
1929.....	174	5, 384	33, 368	13, 985	48, 849	95, 242	267, 509	172, 267
1927.....	161	6, 556	36, 322	16, 332	53, 111	120, 012	293, 565	173, 553
<i>States</i>								
Alabama:								
1933.....	6	74	529	164	363	738	2, 645	1, 907
1931.....	7	( <sup>o</sup> )	796	( <sup>o</sup> )	899	1, 973	5, 804	3, 832
California:								
1933.....	10	168	1, 424	388	1, 661	3, 770	10, 859	7, 088
1931.....	10	( <sup>o</sup> )	1, 384	( <sup>o</sup> )	2, 047	4, 204	11, 742	7, 538
Illinois:								
1933.....	5	40	672	90	650	816	4, 704	3, 888
1931.....	5	( <sup>o</sup> )	1, 050	( <sup>o</sup> )	1, 261	1, 712	5, 909	4, 257
Indiana:								
1933.....	4	131	746	281	639	1, 207	4, 197	2, 989
1931.....	5	( <sup>o</sup> )	1, 643	( <sup>o</sup> )	1, 978	2, 896	7, 504	4, 607
Iowa:								
1933.....	5	77	699	204	614	1, 035	3, 812	2, 778
1931.....	5	( <sup>o</sup> )	1, 078	( <sup>o</sup> )	1, 368	1, 928	5, 561	3, 632
Kansas:								
1933.....	7	68	462	161	419	1, 036	3, 082	2, 046
1931.....	8	( <sup>o</sup> )	816	( <sup>o</sup> )	825	1, 605	4, 054	2, 449
Michigan:								
1933.....	8	73	665	142	836	1, 575	4, 382	2, 807
1931.....	14	( <sup>o</sup> )	1, 305	( <sup>o</sup> )	1, 985	3, 023	6, 428	3, 406

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

[See sec. 26, p. 13]

	Num- ber of estab- lish- ments	Num- ber of sala- ried em- ploy- ees <sup>1</sup>	Num- ber of wage earners (aver- age for the year)	Sala- ries <sup>2</sup>	Wages	Cost of materials, contain- ers, fuel, and pur- chased electric energy	Value of products	Value added by man- ufacture <sup>3</sup>
<i>Thousands of dollars. (See sec. 25, p. 13)</i>								
Missouri:								
1933.....	5	64	1,136	135	928	1,356	4,734	3,378
1931.....	5	( <sup>4</sup> )	1,446	( <sup>4</sup> )	1,305	2,346	5,832	3,486
New York:								
1933.....	12	143	1,140	299	947	1,949	5,227	3,278
1931.....	12	( <sup>4</sup> )	1,817	( <sup>4</sup> )	2,382	4,448	11,319	6,871
Ohio:								
1933.....	10	111	762	241	741	1,086	3,426	2,340
1931.....	11	( <sup>4</sup> )	1,184	( <sup>4</sup> )	1,601	2,756	6,420	3,663
Pennsylvania:								
1933.....	24	513	3,789	1,100	2,880	5,037	15,904	10,867
1931.....	24	( <sup>4</sup> )	5,412	( <sup>4</sup> )	6,863	12,146	33,286	21,139
Tennessee:								
1933.....	5	82	255	185	210	620	1,751	1,131
1931.....	6	( <sup>4</sup> )	476	( <sup>4</sup> )	580	1,260	3,898	2,638
Texas:								
1933.....	9	87	677	196	511	1,093	5,035	3,942
1931.....	9	( <sup>4</sup> )	1,127	( <sup>4</sup> )	968	2,435	8,302	5,867
Washington:								
1933.....	6	35	190	82	193	352	1,448	1,096
1931.....	6	( <sup>4</sup> )	437	( <sup>4</sup> )	608	1,348	3,429	2,081
West Virginia:								
1933.....	3	17	252	37	175	600	1,176	575
1931.....	3	( <sup>4</sup> )	235	( <sup>4</sup> )	236	944	1,439	495
Other States: <sup>5</sup>								
1933.....	29	365	2,431	706	2,072	4,661	14,541	9,879
1931.....	34	( <sup>4</sup> )	4,111	( <sup>4</sup> )	4,959	11,073	27,858	16,785

<sup>1</sup> Not including proprietors and firm members, as follows: 1933, 8; 1931, no data; 1929, 4; 1927, 6.<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.<sup>3</sup> Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.<sup>4</sup> Production and shipments of Portland cement (from annual reports published by the Bureau of Mines, Department of the Interior) were as follows: Production—1933, 63,473,189 barrels; 1931, 125,429,071 barrels. Shipments—1933, 64,282,756 barrels, valued at \$85,600,717; 1931, 127,150,534 barrels, valued at \$140,959,906.<sup>5</sup> No data.<sup>6</sup> States included and number of establishments reporting for 1933 and 1931, respectively, are: Ark., 1, 1; Colo., 2, 2; Fla., 1, 1; Ga., 2, 3; Idaho, 1, 1; Ky., 1, 1; La., 1, 1; Me., 1, 1; Md., 2, 2; Minn., 1, 2; Mont., 1, 2; Nebr., 2, 2; N. J., 1, 2; Okla., 2, 2; Oreg., 3, 3; S. Dak., 1, 1; Utah, 2, 3; Va., 2, 2; Wis., 1, 1; Wyo., 1, 1.

TABLE 2.—WAGE EARNERS, BY QUARTERS, BY STATES: 1933 AND 1931

[The average for the year, table 1, differs from the average of the quarterly figures below. (See fourth sentence, sec. 13, p. 8.) See sec. 26, p. 13]

	1933 <sup>1</sup>				1931			
	March	June	Septem- ber	Decem- ber	March	June	Septem- ber	Decem- ber
United States.....	11, 639	18, 061	18, 982	15, 233	24, 758	26, 531	23, 905	20, 213
<i>States</i>								
Alabama.....	528	503	497	577	776	936	770	699
California.....	1, 165	1, 209	1, 720	1, 888	1, 640	1, 585	1, 198	1, 227
Illinois.....	283	650	974	649	960	1, 175	1, 156	877
Indiana.....	492	908	687	922	1, 522	1, 684	1, 601	1, 396
Iowa.....	337	896	1, 024	1, 005	1, 132	1, 139	1, 110	853
Kansas.....	317	414	570	581	832	947	786	572
Michigan.....	367	944	795	372	1, 389	1, 447	1, 164	824
Missouri.....	940	1, 030	1, 444	1, 200	1, 636	1, 399	1, 501	1, 250
New York.....	663	1, 367	1, 465	883	1, 845	1, 989	1, 919	1, 648
Ohio.....	509	977	950	531	1, 045	1, 403	1, 174	955
Pennsylvania.....	2, 490	4, 968	4, 647	2, 824	5, 603	5, 760	5, 219	4, 673
Tennessee.....	236	292	240	222	451	558	495	367
Texas.....	692	701	795	625	1, 215	1, 218	1, 088	870
Washington.....	114	210	227	243	411	485	497	310
West Virginia.....	173	298	334	243	219	204	267	174

<sup>1</sup> See secs. 5, p. 4, and 13, p. 8. The 139 establishments canvassed with the standard schedule reported wage earners, by months, as follows:

January.....	11, 131	May.....	14, 811	September.....	13, 474
February.....	11, 333	June.....	17, 559	October.....	16, 566
March.....	11, 306	July.....	19, 052	November.....	16, 368
April.....	13, 177	August.....	20, 378	December.....	14, 965

## THE CLAY-PRODUCTS INDUSTRIES AND SAND-LIME BRICK

[Preliminary reports for these industries were issued in September 1934]

**Description of the industries.**—The "Clay products (other than pottery) and nonclay refractories" industry embraces those establishments which are engaged primarily in the manufacture of brick, drain tile and other tile, sewer pipe, stove lining, terra-cotta products, and other refractories, both clay and nonclay.

The establishments assigned to the "Pottery, including porcelain ware" industry are those whose leading products are stoneware, earthenware, porcelain ware, vitreous-china plumbing fixtures, and allied products.

**Scope of the canvass.**—The "Clay products" industries have been canvassed annually since 1921 by the Bureau of the Census, the reports for the odd-numbered years being included in the series presenting the reports of the biennial censuses of manufactures. The data collected for the even-numbered years relate only to production and stocks on hand (except for 1922, for which year data on production only were collected).

**Establishments reporting products valued at less than \$5,000.**—Although the canvass for the biennial census of manufactures is confined, for the most part, to establishments with a yearly output valued at \$5,000 or more, it has been found desirable in the case of the clay-products industries to collect data on production and stocks from all establishments without regard to amount of output.

**Extent of coverage.**—All the establishments in the "Pottery" and "Sand-lime brick" industries and all but 7 of the 1,264 establishments in the "Clay products (other than pottery) and nonclay refractories" industry that reported at the census for 1931 were accounted for in the canvass for 1933. The 7 establishments in the last-named industry which reported for 1931 but not for 1933 employed only three-tenths of 1 percent of the total number of wage earners and contributed the same percentage of the total value of products reported for that industry for 1931.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1 2</sup>	Number of wage earners (average for the year)	Salaries <sup>3</sup>	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>4</sup>
	Thousands of dollars. (See sec. 25, p. 13)							
CLAY PRODUCTS (OTHER THAN POTTERY) AND NONCLAY REFRATORIES								
United States								
1933.....	928	3,018	31,944	4,568	16,967	19,994	64,603	44,609
1931.....	1,264	( <sup>4</sup> )	51,128	( <sup>4</sup> )	44,368	36,969	127,336	90,367
1929.....	1,760	8,189	93,657	21,330	107,348	82,734	297,879	215,145
1927.....	1,857	8,411	101,230	21,869	122,311	100,642	321,890	221,248
Alabama: States								
1933.....	20	38	848	51	259	321	970	649
1931.....	22	( <sup>4</sup> )	927	( <sup>4</sup> )	435	498	1,620	1,122
Arkansas:								
1933.....	6	11	129	16	48	42	157	114
1931.....	5	( <sup>4</sup> )	250	( <sup>4</sup> )	151	138	435	296
California:								
1933.....	55	182	1,682	324	1,255	1,093	3,864	2,771
1931.....	77	( <sup>4</sup> )	2,880	( <sup>4</sup> )	3,015	2,173	8,395	6,222
Colorado:								
1933.....	23	45	341	79	268	220	677	467
1931.....	32	( <sup>4</sup> )	600	( <sup>4</sup> )	635	444	1,608	1,164
Connecticut:								
1933.....	11	33	210	58	128	116	405	289
1931.....	22	( <sup>4</sup> )	480	( <sup>4</sup> )	473	306	1,133	828
Georgia:								
1933.....	16	50	835	79	308	391	1,271	880
1931.....	19	( <sup>4</sup> )	840	( <sup>4</sup> )	434	423	1,184	761
Illinois:								
1933.....	49	179	1,309	277	877	765	2,803	2,038
1931.....	70	( <sup>4</sup> )	2,644	( <sup>4</sup> )	2,795	1,935	7,352	5,416
Indiana:								
1933.....	33	99	1,062	154	972	664	1,977	1,313
1931.....	49	( <sup>4</sup> )	2,237	( <sup>4</sup> )	1,765	1,828	5,021	3,192
Iowa:								
1933.....	20	66	392	88	229	199	821	623
1931.....	28	( <sup>4</sup> )	914	( <sup>4</sup> )	822	608	2,264	1,656
Kansas:								
1933.....	10	24	224	29	131	62	328	266
1931.....	14	( <sup>4</sup> )	518	( <sup>4</sup> )	470	258	1,216	958
Kentucky:								
1933.....	25	88	1,402	160	635	628	2,128	1,500
1931.....	32	( <sup>4</sup> )	1,785	( <sup>4</sup> )	1,166	999	3,581	2,582
Louisiana:								
1933.....	7	12	124	18	42	39	138	99
1931.....	11	( <sup>4</sup> )	171	( <sup>4</sup> )	91	70	245	176
Maine:								
1933.....	7	15	93	16	71	74	194	121
1931.....	9	( <sup>4</sup> )	140	( <sup>4</sup> )	145	113	340	227
Maryland:								
1933.....	19	53	722	72	409	772	1,789	1,017
1931.....	19	( <sup>4</sup> )	759	( <sup>4</sup> )	511	919	2,015	1,096
Massachusetts:								
1933.....	12	22	173	41	124	93	387	264
1931.....	20	( <sup>4</sup> )	422	( <sup>4</sup> )	465	274	1,054	780
Michigan:								
1933.....	11	26	159	27	103	111	334	222
1931.....	19	( <sup>4</sup> )	353	( <sup>4</sup> )	322	216	768	552
Minnesota:								
1933.....	7	17	167	18	120	88	340	262
1931.....	8	( <sup>4</sup> )	244	( <sup>4</sup> )	267	407	868	461
Mississippi:								
1933.....	8	15	152	15	49	44	190	146
1931.....	11	( <sup>4</sup> )	176	( <sup>4</sup> )	86	78	316	238
Missouri:								
1933.....	29	241	2,023	432	1,270	1,775	5,540	3,765
1931.....	41	( <sup>4</sup> )	2,432	( <sup>4</sup> )	1,926	2,255	7,011	4,756
Montana:								
1933.....	3	4	11	7	9	4	27	24
1931.....	6	( <sup>4</sup> )	43	( <sup>4</sup> )	59	63	173	111

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1,2</sup>	Number of wage earners (average for the year)	Salaries <sup>3</sup>	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
	Thousands of dollars. (See sec. 25 p. 13.)							
CLAY PRODUCTS (OTHER THAN POTTERY) AND NONCLAY REFRACATORIES—continued								
States—Continued								
Nebraska:								
1933.....	6	11	49	11	33	33	114	81
1931.....	11	( <sup>4</sup> )	158	( <sup>4</sup> )	130	127	373	246
New Hampshire:								
1933.....	6	11	55	15	40	22	84	62
1931.....	10	( <sup>4</sup> )	155	( <sup>4</sup> )	167	85	350	265
New Jersey:								
1933.....	40	197	1,568	355	1,077	1,257	3,881	2,624
1931.....	58	( <sup>4</sup> )	3,480	( <sup>4</sup> )	3,268	3,067	10,458	7,392
New Mexico:								
1933.....	3	3	29	2	13	8	28	20
1931.....	3	( <sup>4</sup> )	113	( <sup>4</sup> )	56	58	120	62
New York:								
1933.....	36	102	861	165	601	633	2,052	1,418
1931.....	59	( <sup>4</sup> )	2,650	( <sup>4</sup> )	2,878	2,290	7,812	5,522
North Carolina:								
1933.....	27	42	526	48	234	340	988	647
1931.....	29	( <sup>4</sup> )	590	( <sup>4</sup> )	284	364	1,099	735
Ohio:								
1933.....	124	491	5,549	694	3,324	2,653	9,935	7,282
1931.....	177	( <sup>4</sup> )	9,738	( <sup>4</sup> )	9,175	5,591	23,171	17,580
Oklahoma:								
1933.....	10	19	116	21	55	59	186	127
Oregon:								
1933.....	5	10	59	8	33	24	114	89
1931.....	9	( <sup>4</sup> )	105	( <sup>4</sup> )	95	45	199	154
Pennsylvania:								
1933.....	156	572	7,865	845	4,501	5,922	17,360	11,438
1931.....	199	( <sup>4</sup> )	10,262	( <sup>4</sup> )	8,178	8,017	25,289	17,273
South Carolina:								
1933.....	12	20	241	22	69	79	273	194
1931.....	13	( <sup>4</sup> )	284	( <sup>4</sup> )	111	106	387	281
Tennessee:								
1933.....	14	43	366	49	166	116	515	399
1931.....	16	( <sup>4</sup> )	591	( <sup>4</sup> )	326	224	1,096	872
Texas:								
1933.....	28	55	678	76	292	288	1,070	782
1931.....	39	( <sup>4</sup> )	1,020	( <sup>4</sup> )	634	567	2,015	1,448
Utah:								
1933.....	6	16	107	27	76	68	200	133
1931.....	7	( <sup>4</sup> )	216	( <sup>4</sup> )	165	151	357	206
Virginia:								
1933.....	26	53	592	67	286	278	922	644
1931.....	28	( <sup>4</sup> )	674	( <sup>4</sup> )	474	331	1,244	913
Washington:								
1933.....	12	43	213	34	185	133	515	382
1931.....	17	( <sup>4</sup> )	589	( <sup>4</sup> )	748	566	1,909	1,343
West Virginia:								
1933.....	15	63	659	90	466	391	1,246	855
1931.....	20	( <sup>4</sup> )	1,023	( <sup>4</sup> )	1,018	903	3,001	2,099
Wisconsin:								
1933.....	12	17	79	16	42	45	157	111
1931.....	19	( <sup>4</sup> )	135	( <sup>4</sup> )	118	114	361	247
Other States: <sup>6</sup>								
1933.....	19	30	276	63	167	143	625	482
1931.....	36	( <sup>4</sup> )	530	( <sup>4</sup> )	509	360	1,495	1,136
POTTERY, INCLUDING PORCELAIN WARE								
United States								
1933.....	231	1,767	23,632	3,110	17,891	12,179	43,718	31,539
1931.....	275	( <sup>4</sup> )	27,023	( <sup>4</sup> )	26,981	16,393	65,866	49,473
1929.....	313	3,084	35,409	8,927	43,656	27,007	110,622	83,615
1927.....	316	2,962	36,667	8,012	45,150	33,581	110,597	77,017
States								
California:								
1933.....	15	68	611	117	543	487	1,623	1,136
1931.....	16	( <sup>4</sup> )	644	( <sup>4</sup> )	731	507	2,165	1,658

For footnotes, see end of table.



TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1,2</sup>	Number of wage earners (average for the year)	Salaries <sup>3</sup>	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>4</sup>
<i>Thousands of dollars. (See sec. 25, p. 13)</i>								
<b>POTTERY, INCLUDING PORCELAIN WARE—continued</b>								
<i>States—Continued</i>								
Illinois:								
1933.....	15	64	846	103	570	627	1,789	1,162
1931.....	17	( <sup>4</sup> )	1,098	( <sup>4</sup> )	1,040	1,010	3,612	2,603
Indiana:								
1933.....	6	37	483	55	335	256	880	624
1931.....	6	( <sup>4</sup> )	621	( <sup>4</sup> )	513	339	1,252	913
New Jersey:								
1933.....	38	341	3,347	528	2,629	1,565	7,024	5,459
1931.....	50	( <sup>4</sup> )	4,055	( <sup>4</sup> )	4,523	2,007	10,849	8,843
New York:								
1933.....	9	138	1,094	284	714	393	1,854	1,461
1931.....	11	( <sup>4</sup> )	1,874	( <sup>4</sup> )	1,736	1,152	4,618	3,465
Ohio:								
1933.....	66	407	6,176	618	4,482	3,066	10,884	7,818
1931.....	77	( <sup>4</sup> )	7,770	( <sup>4</sup> )	7,172	4,529	17,471	12,941
Pennsylvania:								
1933.....	18	212	2,180	365	1,582	1,181	4,263	3,081
1931.....	21	( <sup>4</sup> )	2,375	( <sup>4</sup> )	2,445	1,673	5,892	4,219
Tennessee:								
1933.....	5	35	485	46	354	257	901	644
1931.....	6	( <sup>4</sup> )	509	( <sup>4</sup> )	396	326	1,067	730
Texas:								
1933.....	6	6	57	5	36	16	103	57
1931.....	5	( <sup>4</sup> )	42	( <sup>4</sup> )	34	11	102	91
West Virginia:								
1933.....	17	217	5,520	439	4,493	3,014	9,496	6,482
1931.....	17	( <sup>4</sup> )	5,011	( <sup>4</sup> )	5,310	3,152	11,370	8,218
Other States: <sup>7</sup>								
1933.....	36	242	2,833	551	2,153	1,317	4,900	3,583
1931.....	49	( <sup>4</sup> )	3,024	( <sup>4</sup> )	3,082	1,677	7,469	5,792
<b>SAND-LIME BRICK</b>								
<i>United States</i>								
1933.....	10	23	84	36	61	74	205	131
1931.....	31	( <sup>4</sup> )	322	( <sup>4</sup> )	357	461	1,268	806
1929.....	40	137	566	370	776	945	2,971	2,026
1927.....	45	143	790	373	1,051	1,158	3,616	2,458

<sup>1</sup> Not including proprietors and firm members, as follows: "Clay products (other than pottery) and nonclay refractories"—1933, 154; 1931, no data; 1929, 530; 1927, 600. "Pottery (including porcelain ware)"—1933, 50; 1931, no data; 1929, 95; 1927, 120. "Sand-lime brick"—1933, none; 1931, no data; 1929, 4; 1927, 8.

<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.

<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.

<sup>4</sup> No data.

<sup>5</sup> Data for 1931 included in "Other States" items to avoid disclosing figures for an individual establishment.

<sup>6</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Ariz., 2, 4; Del., 2, 2; D. C., 2, 3; Fla., 3, 3; Idaho, 3, 4; Nev., 1, 1; N. Dak., 2, 3; Okla. (1931), 11; R. I., 1, 1; S. Dak., 1, 0; Vt., 1, 1; Wyo., 1, 3.

<sup>7</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Ala., 1, 0; Ark., 2, 2; Colo., 3, 3; Conn., 2, 3; D. C., 1, 1; Ga., 0, 1; Iowa, 1, 1; Kans., 1, 1; Ky., 2, 3; La., 1, 1; Md., 4, 3; Mass., 2, 5; Mich., 5, 5; Minn., 1, 1; Miss., 1, 1; Mo., 2, 2; Nebr., 0, 1; N. C., 1, 4; Oreg., 1, 2; S. C., 0, 2; Va., 1, 1; Wash., 1, 3; Wis., 3, 3.

<sup>8</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Fla., 0, 1; Ind., 0, 1; La., 0, 1; Mass., 2, 2; Mich., 2, 1; Minn., 2, 3; Mo., 0, 1; N. J., 0, 2; N. Y., 1, 2; Ohio, 1, 1; Pa., 1, 1; S. Dak., 0, 1; Tex., 0, 1; Wash., 1, 1; Wis., 0, 2.

TABLE 2.—CLAY PRODUCTS AND SAND-LIME BRICK—PRODUCTION, BY KIND, QUANTITY, AND VALUE, 1933, 1932, AND 1931, AND STOCKS ON HAND, DEC. 31, 1933, FOR THE UNITED STATES

[Ton, 2,000 pounds; square, 100 square feet]

	PRODUCTION						Stocks on hand Dec. 31, 1933, quantity <sup>1</sup>
	Quantity <sup>1</sup>			Value in thousands of dollars <sup>1</sup>			
	1933	1932	1931	1933	1932	1931	
CLAY PRODUCTS (OTHER THAN POTTERY) AND NONCLAY REFRACTORIES; POTTERY							
1. Clay-products industries, all products, total.....				108,321	96,251	193,202	
2. Clay products (other than pottery).....				52,004	49,749	112,226	
3. Nonclay refractories.....				12,068	6,100	13,887	
4. Pottery, including porcelain ware.....				43,791	40,249	65,922	
5. Other products (not normally belonging to the industries).....				458	152	1,167	
6. Clay products, including pottery, made by establishments in clay-products industries with products under \$5,000.....				656	583	409	
7. Clay products, including pottery, made as secondary products in other industries.....				347	(?)	1,606	
Clay products, including pottery, and non-clay refractories, aggregate (2, 3, 4, 6, and 7).....				108,865	96,682	194,050	
<i>Clay products (other than pottery)</i>							
Common brick.....	<i>M thous.</i> 1,020	<i>M thous.</i> 1,013	<i>M thous.</i> 2,315	8,816	8,705	21,652	<i>M thous.</i> 649
Vitrified brick or block:							
For paving.....	54	115	179	1,106	2,411	3,845	59
For other purposes.....	9	18	29	118	231	422	42
Face brick.....	270	384	903	3,807	5,273	13,271	452
Enameled brick.....	4	6	9	172	302	484	13
Hollow brick.....	4	2	6	80	18	58	3
	<i>M tons</i> 26	<i>M tons</i> 25	<i>M tons</i> 55	1,831	2,317	5,492	<i>M tons</i> 7
Terra cotta.....							
Hollow building tile:							
Partition, load-bearing, furring, and book tile.....	527	708	1,646	2,404	3,395	8,774	576
Conduit.....	12	58	121	141	572	1,628	82
Floor-arch, silo, and corncrib tile; radial chimney blocks; fireproofing tile.....	69	63	160	291	302	769	43
	<i>M sqs.</i> 103	<i>M sqs.</i> 126	<i>M sqs.</i> 285	911	1,283	3,125	<i>M sqs.</i> 90
Floor tile (plain, vitreous, encaustic, quarry, etc.).....	<i>M sq. ft.</i> 5,793	<i>M sq. ft.</i> 6,467	<i>M sq. ft.</i> 12,181	887	830	2,052	<i>M sq. ft.</i> 6,881
Ceramic mosaic tile (vitreous and semivitreous, unglazed).....	4,229	4,973	8,744	699	889	1,781	3,397
Enameled tile (bright, dull, matt, and semi-matt finishes) and glazed ceramic mosaic.....	7,252	8,433	19,430	2,060	2,433	6,483	4,079
Falence tile (including hand-decorated tile).....	1,149	1,020	2,001	326	611	1,266	691
Wall tile (white and bright-glazed), including trim.....	9,930	7,703	17,716	1,552	2,010	4,993	5,884
	<i>M tons</i>	<i>M tons</i>	<i>M tons</i>				<i>M tons</i>
Drain tile.....	168	149	253	1,127	975	1,667	111
Sewer pipe.....	451	439	823	4,911	3,745	9,448	367
Stove lining.....	6	5	9	224	195	317	2
Flue lining.....	45	44	86	471	377	839	36
Chimney pipe and tops.....	5	4	4	57	68	134	3
Wall coping.....	8	6	13	80	50	149	6
Fire-clay products:							
Brick, block, or tile for locomotive and other fire-box lining, etc. (9-inch equivalent).....	<i>M thous.</i> 373	<i>M thous.</i> 217	<i>M thous.</i> 416	13,116	7,611	15,686	<i>M thous.</i> 162
High-alumina brick (over 40 percent Al <sub>2</sub> O <sub>3</sub> ).....	10	5	7	718	464	734	5
	<i>M tons</i> 107	<i>M tons</i> 86	<i>M tons</i> 127	2,293	1,849	3,068	<i>M tons</i> 44
Special shapes.....							
Glass-house tank blocks, melting pots, stoppers, floaters, and rings.....	22	16	23	1,757	908	1,259	20
Refractory cement (clay).....	26	22	39	1,057	866	1,350	3
Clay sold, raw or prepared, including fire-clay dust.....	192	135	214	1,012	686	970	
Other clay products.....				745	775	1,585	
<i>Nonclay refractories</i>							
Silica brick.....	<i>M thous.</i> 111	<i>M thous.</i> 40	<i>M thous.</i> 104	4,655	1,762	5,132	<i>M thous.</i> 38
Magnesite and chrome brick.....	9	3	8	2,580	845	2,234	3
Crucibles, graphite.....				758	639	1,114	

For footnotes, see end of table.

TABLE 2.—CLAY PRODUCTS AND SAND-LIME BRICK—PRODUCTION, BY KIND, QUANTITY, AND VALUE, 1933, 1932, AND 1931, AND STOCKS ON HAND, DEC. 31, 1933, FOR THE UNITED STATES—Continued

(Ton, 2,000 pounds; square, 100 square feet)

	PRODUCTION						Stocks on hand Dec. 31, 1933, quantity <sup>1</sup>
	Quantity <sup>1</sup>			Value in thousands of dollars <sup>1</sup>			
	1933	1932	1931	1933	1932	1931	
<i>Nonclay refractories—Continued.</i>	<i>M tons</i>	<i>M tons</i>	<i>M tons</i>				<i>M tons</i>
Refractory cement (nonclay).....	42	17	36	1, 130	444	920	2
Other nonclay refractories, including those of alumina and silicon-carbide.....				2, 946	2, 414	4, 769	
<i>Pottery</i>							
Vitreous-china plumbing fixtures (exclusive of fittings), <sup>2</sup> total.....	<i>M pcs.</i>	<i>M pcs.</i>	<i>M pcs.</i>	7, 709	6, 861	12, 894	
Bathroom and toilet fixtures:							
Closet bowls:							
Siphon jets.....	53	79	171	311	522	1, 356	
Washdowns.....	750	492	746	2, 319	1, 663	2, 746	
Reverse traps.....	61	47	88	278	205	443	
Flush tanks:							
Lowdown (large and small).....	785	536	788	2, 833	2, 109	3, 799	
Other.....	3	1	4	10	5	22	
Lavatories.....	80	115	226	760	1, 088	2, 513	
Other bathroom and toilet fixtures.....				697	1, 041	1, 383	
Other vitreous-china fixtures.....				502	228	632	
Semivitreous or porcelain (all-clay) plumbing fixtures (exclusive of fittings), <sup>2</sup> total.....				647	854	1, 995	
Laundry tubs and kitchen sinks.....	19	24	55	178	294	453	
Other semivitreous fixtures.....				469	559	1, 542	
Red earthenware.....				1, 207	1, 238	2, 034	
Stoneware (except chemical) and yellow and Rockingham ware:							
Stoneware.....				2, 066	2, 337	3, 086	
Yellow and Rockingham ware.....				156	179	214	
Chemical stoneware.....				383	361	652	
Chemical porcelain.....				317	( <sup>4</sup> )	308	
White ware, including cream-color, white granite, semiporcelain, and semivitreous porcelain ware.....				15, 005	14, 325	20, 108	
Hotel china.....				5, 008	4, 220	6, 594	
Porcelain electrical supplies (exclusive of fittings), total.....				7, 056	6, 104	13, 154	
Insulators, total.....				1, 973	1, 813	6, 284	
Pin type:							
Up to, but not including, 7,500 volts.....				242	214	392	
7,500 volts to, but not including, 17,000 volts.....				83	70	402	
17,000 volts to, but not including, 45,000 volts.....				166	123	533	
45,000 volts and over.....				180	98	381	
Suspension type.....				818	849	3, 256	
Knobs, tubes, and cleats.....				483	458	1, 320	
Other electrical supplies.....				5, 083	4, 291	6, 871	
Garden pottery.....				176	261	308	
Art pottery.....				1, 489	1, 414	1, 615	
Saggers.....				326	334	645	
Other pottery products (including red and brown white-lined cooking ware, porcelain china, and gas and electric logs).....				2, 479	1, 887	2, 965	
<b>SAND-LIME BRICK</b>							
1. Sand-lime brick industry, all products, total.....				205	475	1, 268	
	<i>M thous.</i>	<i>M thous.</i>	<i>M thous.</i>				<i>M thous.</i>
2. Sand-lime brick.....	23	53	144	195	433	1, 237	3
3. Other products (not normally belonging to the industry).....				10	42	31	

<sup>1</sup> See sec. 25, p. 13.<sup>2</sup> Not tabulated separately for years alternating with biennial-census years.<sup>3</sup> For statistics on total production of plumbing fixtures (made of clay, iron, cement, etc.), see report on "Plumbers' supplies."<sup>4</sup> Withheld to avoid disclosing approximations of data for individual establishments; included in figure for "Other pottery products."<sup>5</sup> See footnote 3.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR SELECTED STATES: 1933 AND 1931

[The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 26, p. 13]

	NUMBER REPORTED FOR—											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>CLAY PRODUCTS (OTHER THAN POTTERY) AND NON-CLAY REFRACTORIES</b>												
<i>United States</i>												
1933.....	<b>22,154</b>	22,172	22,968	25,456	30,139	35,975	40,694	42,657	40,202	36,443	33,028	31,435
1931.....	47,135	47,648	52,425	56,167	57,867	57,413	55,628	53,291	50,938	49,225	45,234	<i>40,580</i>
<i>States</i>												
Alabama:												
1933.....	<b>362</b>	507	536	564	847	937	<b>1,353</b>	1,299	1,130	791	821	1,025
1931.....	736	1,102	972	991	1,004	<b>1,251</b>	1,005	816	856	1,020	783	<i>585</i>
Arkansas:												
1933.....	119	<b>96</b>	101	110	116	110	153	<b>274</b>	140	113	112	107
1931.....	262	247	247	257	265	267	204	257	260	271	217	<i>155</i>
California:												
1933.....	<b>1,408</b>	<b>1,440</b>	<b>1,457</b>	<b>1,465</b>	<b>1,612</b>	<b>1,759</b>	<b>1,903</b>	<b>1,894</b>	<b>1,939</b>	<b>1,882</b>	<b>1,801</b>	<b>1,629</b>
1931.....	2,540	2,782	2,985	3,061	3,134	3,121	<b>3,138</b>	2,956	2,783	2,701	2,620	<i>2,456</i>
Colorado:												
1933.....	282	<b>229</b>	234	291	353	367	407	<b>441</b>	394	350	396	350
1931.....	514	500	574	590	658	685	705	704	680	547	508	<i>474</i>
Connecticut:												
1933.....	106	<b>97</b>	102	105	142	261	255	<b>411</b>	363	303	216	156
1931.....	278	<i>248</i>	346	375	543	649	<b>731</b>	715	724	530	309	313
Florida:												
1933.....	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	74	75	75	75	60
1931.....	<b>61</b>	<b>60</b>	25	14	6	6	6	6	6	14	24	14
Georgia:												
1933.....	649	580	678	650	746	914	991	<b>1,133</b>	968	904	934	867
1931.....	736	821	740	764	703	675	718	881	994	1,061	<b>1,069</b>	916
Idaho:												
1933.....	19	22	7	21	20	19	27	44	21	31	18	20
1931.....	18	20	28	22	45	56	57	42	40	24	11	11
Illinois:												
1933.....	815	740	<b>732</b>	858	1,213	1,501	1,681	1,854	<b>1,957</b>	1,686	1,344	1,329
1931.....	2,132	2,236	2,920	3,383	<b>3,491</b>	3,089	2,984	2,624	2,718	2,336	2,038	<i>1,774</i>
Indiana:												
1933.....	717	677	690	958	1,041	1,180	1,373	1,470	1,351	1,300	1,027	957
1931.....	2,056	1,997	1,976	2,393	2,552	2,847	2,586	2,410	2,074	2,107	2,102	<i>1,940</i>
Iowa:												
1933.....	164	91	135	257	415	526	598	504	531	462	426	426
1931.....	631	739	977	1,158	<b>1,240</b>	1,181	983	1,027	991	835	685	<i>519</i>
Kansas:												
1933.....	209	214	212	215	223	179	267	290	258	175	200	245
1931.....	530	492	537	505	514	591	<b>663</b>	548	497	484	452	<i>406</i>
Kentucky:												
1933.....	950	<b>868</b>	1,029	1,096	1,295	<b>1,830</b>	1,779	1,795	1,716	1,527	1,492	1,450
1931.....	1,812	1,824	<b>1,835</b>	<b>1,876</b>	1,745	1,739	<b>1,808</b>	1,827	1,785	1,843	1,639	<i>1,586</i>
Louisiana:												
1933.....	153	123	158	152	121	109	109	98	110	149	144	56
1931.....	<i>56</i>	68	98	160	193	239	263	268	204	204	164	77
Maine:												
1933.....	66	67	<b>24</b>	45	88	113	113	159	153	109	81	97
1931.....	89	88	95	116	148	175	192	198	196	172	116	92
Maryland:												
1933.....	595	557	<b>554</b>	676	666	762	786	784	824	844	795	819
1931.....	756	763	<b>848</b>	809	773	836	840	744	692	681	717	<i>648</i>
Massachusetts:												
1933.....	<i>90</i>	111	111	123	148	184	273	277	222	221	169	148
1931.....	286	290	<b>280</b>	287	393	600	<b>714</b>	583	518	446	383	287
Michigan:												
1933.....	78	<b>52</b>	59	147	177	210	210	198	191	195	169	<b>216</b>
1931.....	510	400	375	352	352	437	307	341	258	266	306	357
Minnesota:												
1933.....	34	<b>32</b>	41	83	131	248	268	288	298	270	165	143
1931.....	135	151	272	317	<b>344</b>	285	288	290	255	249	227	<i>116</i>
Mississippi:												
1933.....	<i>64</i>	84	99	117	123	193	211	194	232	204	148	156
1931.....	146	127	187	149	227	166	213	219	227	176	156	<i>125</i>
Missouri:												
1933.....	1,439	1,396	<b>1,293</b>	1,476	1,642	2,049	2,388	<b>2,766</b>	2,756	2,712	2,270	2,083
1931.....	2,730	2,676	2,566	2,528	2,488	2,326	2,297	2,324	2,392	2,346	2,393	<i>2,116</i>
Montana:												
1933.....	<i>4</i>	<i>4</i>	6	<i>4</i>	<i>4</i>	12	16	27	21	20	10	4
1931.....	13	25	38	53	49	49	62	68	48	59	39	17

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR SELECTED STATES: 1933 AND 1931—Continued

[The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 26, p. 13]

	NUMBER REPORTED FOR—											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>CLAY PRODUCTS (OTHER THAN POTTERY) AND NON-CLAY REFRACTORIES—CON.</b>												
<i>States—Continued</i>												
Nebraska:												
1933.....	<i>11</i>	13	<i>11</i>	29	53	62	39	93	98	104	57	17
1931.....	72	52	104	139	260	<b>296</b>	278	273	135	121	120	45
New Hampshire:												
1933.....	18	<i>14</i>	15	24	57	98	104	102	94	85	26	18
1931.....	54	52	59	87	193	295	317	292	223	149	94	46
New Jersey:												
1933.....	1,519	1,424	<i>1,235</i>	1,262	1,493	1,763	1,888	1,736	1,783	1,691	1,623	1,390
1931.....	3,602	3,329	3,450	3,583	3,795	3,693	3,670	3,584	3,494	3,472	3,157	<b>2,926</b>
New Mexico:												
1933.....	23	25	51	<i>19</i>	14	22	34	25	23	58	40	24
1931.....	100	102	114	124	113	115	131	138	111	119	103	<b>93</b>
New York:												
1933.....	532	448	<i>440</i>	530	742	912	1,295	1,361	1,339	1,095	975	665
1931.....	1,434	<i>1,278</i>	2,469	3,137	3,526	3,475	3,084	2,901	<b>2,848</b>	2,810	2,611	2,232
North Carolina:												
1933.....	<i>291</i>	342	438	451	601	695	796	654	581	505	442	521
1931.....	<b>390</b>	341	363	621	758	816	747	626	674	599	547	459
Ohio:												
1933.....	<i>3,914</i>	4,362	4,304	4,876	5,651	5,986	6,902	7,080	6,562	5,805	5,589	5,577
1931.....	9,381	9,637	10,576	11,077	11,350	10,764	9,996	9,742	9,315	9,296	8,252	<b>7,476</b>
Oklahoma:												
1933.....	103	96	92	67	86	125	140	159	116	119	133	150
1931.....	201	<i>147</i>	264	303	288	248	247	230	200	<i>147</i>	219	150
Oregon:												
1933.....	50	<i>24</i>	34	50	56	80	61	56	80	82	84	49
1931.....	44	94	124	129	131	125	116	114	113	113	98	56
Pennsylvania:												
1933.....	<i>5,247</i>	5,248	5,521	5,878	7,131	9,004	10,284	10,886	10,178	9,040	8,259	7,703
1931.....	10,492	10,560	11,147	11,627	11,172	10,901	10,611	10,047	9,596	9,521	8,971	<b>8,496</b>
South Carolina:												
1933.....	118	123	176	208	255	326	353	327	298	311	230	169
1931.....	235	206	253	309	377	354	257	285	287	303	334	<b>202</b>
Tennessee:												
1933.....	183	211	394	292	406	454	397	489	400	402	365	419
1931.....	532	587	596	641	562	723	654	667	644	574	488	<b>423</b>
Texas:												
1933.....	489	659	662	713	628	755	880	842	688	647	547	624
1931.....	949	978	1,195	1,098	1,133	1,141	1,096	1,047	990	930	904	<b>776</b>
Utah:												
1933.....	58	62	<i>49</i>	87	92	129	148	136	135	149	121	115
1931.....	163	150	253	270	252	243	256	243	271	232	151	108
Virginia:												
1933.....	339	<i>295</i>	367	559	708	806	783	747	741	650	578	529
1931.....	530	566	679	717	828	832	902	809	738	572	487	<b>425</b>
Washington:												
1933.....	167	<i>145</i>	173	175	162	174	198	299	255	249	264	297
1931.....	552	606	562	609	676	704	667	617	576	550	483	<b>463</b>
West Virginia:												
1933.....	528	<i>455</i>	507	515	606	767	752	830	855	766	674	653
1931.....	<b>923</b>	1,015	1,010	1,189	1,095	1,069	1,037	1,079	1,025	950	965	937
Wisconsin:												
1933.....	16	16	54	63	44	72	180	229	142	87	32	<i>14</i>
1931.....	49	57	67	112	184	208	<b>274</b>	229	184	115	78	68
<b>POTTERY, INCLUDING PORCELAIN WARE</b>												
<i>United States</i>												
1933.....	19,826	20,687	20,572	20,912	21,525	22,420	23,812	25,932	26,598	27,591	27,189	26,525
1931.....	27,624	28,211	28,184	28,134	28,513	27,866	26,513	26,648	26,386	25,813	25,643	<b>24,745</b>
<i>States</i>												
California:												
1933.....	467	535	548	555	584	612	664	712	717	727	644	562
1931.....	609	663	683	691	678	678	661	647	630	619	621	<b>544</b>

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR SELECTED STATES: 1933 AND 1931—Continued

[The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 26, p. 13]

	NUMBER REPORTED FOR—											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
POTTERY (INCLUDING PORCELAIN WARE)—contd.												
States—Continued												
Colorado:												
1933.....	<i>62</i>	65	65	65	67	71	90	99	107	111	120	127
1931.....	106	106	108	110	71	71	79	85	87	85	85	89
Illinois:												
1933.....	<i>741</i>	750	756	780	835	797	820	950	971	960	937	857
1931.....	1,114	1,090	1,096	1,071	1,108	1,143	1,161	1,127	<i>1,046</i>	1,096	1,069	1,057
Indiana:												
1933.....	342	343	<i>337</i>	340	342	334	536	603	646	655	654	618
1931.....	698	641	625	625	<i>694</i>	631	599	616	614	605	605	596
Maryland:												
1933.....	295	355	302	285	325	322	<i>271</i>	352	323	345	398	419
1931.....	506	567	555	553	585	543	<i>397</i>	501	519	513	491	510
Michigan:												
1933.....	<i>1,075</i>	1,101	1,101	1,112	1,160	1,165	1,173	1,245	1,290	1,290	1,292	1,291
1931.....	956	983	991	994	967	955	960	879	959	979	973	994
New Jersey:												
1933.....	2,726	2,776	<i>2,592</i>	2,746	2,953	3,224	3,244	3,801	4,041	4,353	4,073	3,630
1931.....	4,282	<i>4,344</i>	4,300	4,305	4,277	4,161	4,028	3,924	3,880	3,846	3,782	<i>3,627</i>
New York:												
1933.....	1,079	999	<i>988</i>	1,029	1,038	1,085	1,040	1,169	1,148	1,172	1,176	1,204
1931.....	2,026	2,058	2,053	1,889	2,002	1,892	<i>1,691</i>	1,759	1,824	1,736	1,799	1,753
Ohio:												
1933.....	<i>5,139</i>	5,802	5,506	5,455	5,844	6,104	6,144	6,600	6,834	7,018	6,925	6,742
1931.....	8,037	<i>8,422</i>	8,397	8,279	8,271	8,087	7,756	7,857	7,494	7,044	6,970	<i>6,632</i>
Pennsylvania:												
1933.....	<i>1,878</i>	1,917	1,957	1,936	1,989	2,198	2,250	2,377	2,462	2,445	2,394	2,352
1931.....	2,390	2,411	2,382	2,381	2,435	2,422	2,356	2,339	<i>2,315</i>	2,370	2,351	2,346
Tennessee:												
1933.....	<i>400</i>	402	416	414	431	457	489	582	546	570	563	546
1931.....	518	509	494	509	<i>437</i>	493	510	524	528	514	520	498
Texas:												
1933.....	53	61	59	60	54	53	54	61	62	62	62	<i>42</i>
1931.....	<i>27</i>	40	43	46	46	48	48	49	43	39	39	33
West Virginia:												
1933.....	4,421	<i>4,375</i>	4,716	4,903	4,682	4,758	5,861	6,142	6,176	6,598	6,701	6,903
1931.....	4,908	4,882	4,953	5,190	5,514	5,307	4,807	4,890	5,017	4,941	4,936	<i>4,789</i>
Wisconsin:												
1933.....	<i>659</i>	643	622	624	611	<i>607</i>	593	623	628	633	626	626
1931.....	699	683	690	673	647	651	632	620	608	613	613	610

# CONCRETE PRODUCTS

[A preliminary report for this industry was issued on Oct. 16, 1934]

**Description of the industry.**—This industry classification covers establishments engaged primarily in the manufacture of concrete products such as building block and tile, brick, cast stone, pipe, vaults, etc., and premixed concrete. Concrete construction work on buildings, bridges, etc., is not included.

**Extent of coverage.**—The 1933 coverage of the establishments reporting in this industry for 1931 was practically complete. Although 22 of the 1,432 such establishments failed to supply any information in regard to their status (active, idle, etc.), or their activities in 1933, these establishments accounted for only 1 percent of the total number of wage earners and seven-tenths of 1 percent of the total value of products reported for the industry.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1 2</sup>	Number of wage earners (average for the year)	Salaries <sup>3</sup>	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>4</sup>
Thousands of dollars. (See sec. 25, p. 13)								
United States								
1933.....	766	1,062	4,422	1,488	3,592	9,289	20,538	11,249
1931.....	1,432	( <sup>1</sup> )	9,253	( <sup>1</sup> )	10,728	22,373	53,192	30,819
1929.....	2,438	3,458	16,505	8,349	22,688	34,035	92,901	53,866
1927.....	2,330	3,306	17,808	7,463	24,898	33,913	93,259	59,346
States								
Alabama:								
1933.....	7	8	30	11	18	47	123	76
1931.....	18	( <sup>1</sup> )	119	( <sup>1</sup> )	85	347	614	267
California:								
1933.....	62	82	445	129	363	749	1,853	1,104
1931.....	106	( <sup>1</sup> )	757	( <sup>1</sup> )	1,016	1,912	4,235	2,323
Connecticut:								
1933.....	8	10	53	10	45	46	136	90
1931.....	22	( <sup>1</sup> )	225	( <sup>1</sup> )	321	287	924	638
District of Columbia:								
1933.....	6	26	106	47	109	1,119	2,015	896
1931.....	6	( <sup>1</sup> )	103	( <sup>1</sup> )	139	612	1,171	559
Florida:								
1933.....	10	12	71	13	32	137	252	115
1931.....	13	( <sup>1</sup> )	62	( <sup>1</sup> )	49	113	292	180
Georgia:								
1933.....	8	9	56	11	22	43	94	51
1931.....	12	( <sup>1</sup> )	92	( <sup>1</sup> )	68	118	347	229
Illinois:								
1933.....	45	60	245	112	249	352	1,155	803
1931.....	83	( <sup>1</sup> )	511	( <sup>1</sup> )	684	767	2,573	1,806
Indiana:								
1933.....	18	22	98	17	80	135	380	245
1931.....	46	( <sup>1</sup> )	276	( <sup>1</sup> )	286	414	1,176	762
Iowa:								
1933.....	17	22	93	23	66	146	292	146
1931.....	28	( <sup>1</sup> )	100	( <sup>1</sup> )	94	194	433	239
Kansas:								
1933.....	11	11	43	12	31	60	140	80
1931.....	23	( <sup>1</sup> )	109	( <sup>1</sup> )	96	228	490	263

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
Thousands of dollars. (See sec. 25, p. 13)								
<i>States—Continued</i>								
Louisiana:								
1933.....	7	6	47	5	29	71	152	81
1931.....	14	( <sup>4</sup> )	133	( <sup>4</sup> )	122	249	549	300
Maryland:								
1933.....	16	22	99	28	75	309	557	243
1931.....	24	( <sup>4</sup> )	125	( <sup>4</sup> )	142	311	751	440
Massachusetts:								
1933.....	34	51	216	82	212	317	817	501
1931.....	50	( <sup>4</sup> )	475	( <sup>4</sup> )	706	775	2,230	1,455
Michigan:								
1933.....	27	28	106	30	94	165	483	319
1931.....	73	( <sup>4</sup> )	313	( <sup>4</sup> )	336	550	1,538	988
Minnesota:								
1933.....	32	28	135	36	116	269	576	307
1931.....	56	( <sup>4</sup> )	286	( <sup>4</sup> )	306	774	1,544	770
Missouri:								
1933.....	21	34	170	59	152	617	1,138	521
1931.....	29	( <sup>4</sup> )	323	( <sup>4</sup> )	231	1,341	2,450	1,109
Nebraska:								
1933.....	14	14	61	14	44	93	208	114
1931.....	19	( <sup>4</sup> )	91	( <sup>4</sup> )	96	174	454	280
New Jersey:								
1933.....	52	64	293	106	253	449	1,168	720
1931.....	109	( <sup>4</sup> )	730	( <sup>4</sup> )	891	1,507	3,978	2,471
New York:								
1933.....	84	102	471	156	441	736	1,894	1,158
1931.....	170	( <sup>4</sup> )	1,054	( <sup>4</sup> )	1,502	1,915	5,652	3,736
North Carolina:								
1933.....	5	6	41	6	13	33	67	34
1931.....	6	( <sup>4</sup> )	42	( <sup>4</sup> )	27	53	121	69
Ohio:								
1933.....	54	65	271	75	204	428	1,131	703
1931.....	98	( <sup>4</sup> )	471	( <sup>4</sup> )	541	1,086	2,558	1,472
Oklahoma:								
1933.....	5	13	39	17	22	41	106	65
1931.....	8	( <sup>4</sup> )	85	( <sup>4</sup> )	70	255	466	211
Oregon:								
1933.....	8	11	25	13	19	62	155	92
1931.....	14	( <sup>4</sup> )	62	( <sup>4</sup> )	72	168	305	197
Pennsylvania:								
1933.....	82	156	440	214	354	1,341	2,526	1,185
1931.....	162	( <sup>4</sup> )	768	( <sup>4</sup> )	920	3,911	8,017	4,105
Tennessee:								
1933.....	7	14	57	14	34	140	222	81
1931.....	14	( <sup>4</sup> )	190	( <sup>4</sup> )	173	283	676	393
Texas:								
1933.....	19	33	121	32	85	258	486	228
1931.....	39	( <sup>4</sup> )	334	( <sup>4</sup> )	305	714	1,087	973
Virginia:								
1933.....	12	27	123	38	83	209	437	229
1931.....	18	( <sup>4</sup> )	186	( <sup>4</sup> )	168	426	894	468
Washington:								
1933.....	24	35	115	54	91	237	484	247
1931.....	34	( <sup>4</sup> )	197	( <sup>4</sup> )	246	536	1,238	702
Wisconsin:								
1933.....	26	31	87	34	59	259	495	236
1931.....	50	( <sup>4</sup> )	245	( <sup>4</sup> )	271	510	1,233	723
Other States: <sup>5</sup>								
1933.....	45	60	265	82	199	423	997	574
1931.....	98	( <sup>4</sup> )	789	( <sup>4</sup> )	765	1,843	4,535	2,692

<sup>1</sup> Not including proprietors and firm members, as follows: 1933, 282; 1931, no data; 1929, 1,734; 1927, 1,866.<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.<sup>4</sup> No data.<sup>5</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Ariz., 2, 5; Ark., 2, 2; Colo., 2, 8; Del., 4, 10; Idaho, 2, 1; Ky., 7, 15; Maine, 2, 5; Miss., 2, 4; Mont., 1, 1; Nev., 0, 1; N. H., 1, 3; N. Mex., 2, 2; N. Dak., 3, 5; R. I., 1, 8; S. C., 2, 5; S. Dak., 5, 8; Utah, 1, 2; W. Va., 5, 13; Wyo., 1, 0.



TABLE 2.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929

	QUANTITY <sup>1</sup>			VALUE IN THOUSANDS OF DOLLARS <sup>1</sup>		
	1933	1931	1929	1933	1931	1929
1. "Concrete-products" industry, all products, total.....				20,538	53,192	92,901
2. Concrete products.....				19,417	52,624	92,244
3. Other products, not normally belonging to the industry.....				1,029	435	484
4. Receipts for contract and custom work.....				91	133	173
5. Concrete products made as secondary products in other industries.....				165	362	1,012
Concrete products, aggregate (2 and 5).....				19,582	52,986	93,256
Building materials, total.....				4,378	<sup>2</sup> 16,965	<sup>2</sup> 48,071
Art marble and Spanish floor tile.....	<i>M tons</i>	<i>M tons</i>	<i>M tons</i>	140	337	738
Block and tile, except roofing tile.....	514	1,661	4,327	3,025	10,601	30,472
Brick.....	4	52	163	28	342	1,095
Cast stone.....	30	131	332	847	4,823	12,927
Roofing tile.....	12	32	137	339	862	2,869
Circular structures.....	26	78	213	385	815	2,216
Conduit and pipe.....	504	<sup>2</sup> 1,234	<sup>2</sup> 1,816	5,598	<sup>2</sup> 15,397	<sup>2</sup> 23,107
Culvert pipe.....	233	403	358	2,562	4,649	4,379
Drain tile.....	12	56	76	138	543	715
Electric conduits.....		7	13		151	296
Irrigation pipe.....	66	140	255	691	1,591	3,055
Pressure pipe, reinforced.....	4	147	112	115	3,143	2,292
Sewer pipe.....	188	481	1,004	2,092	5,320	12,371
Household and other accessories.....				580	1,262	2,816
Laundry trays.....	10	19	36	281	547	1,102
Other <sup>3</sup> .....				299	716	1,714
Vaults.....	56	68	83	2,044	2,757	3,271
Paving materials.....	8	23	54	85	295	695
Poles and posts.....	5	16	28	197	693	1,412
Premixed concrete.....	<i>M cu. yds.</i>	<i>M cu. yds.</i>	<i>M cu. yds.</i>	5,538	12,807	7,618
Other products in which cement is a material <sup>4</sup> .....	982	2,086	( <sup>4</sup> )	600	1,996	2,716
Concrete products, not distributed by kind.....				178		1,334

<sup>1</sup> See sec. 25, p. 13.<sup>2</sup> Revised.<sup>3</sup> Garbage boxes, garden furniture, incinerators, and septic tanks.<sup>4</sup> Not called for on schedule.<sup>5</sup> Battery wells and boxes, concrete-filled columns, cribbing, fireplaces and mantels, grease traps, meter boxes, monuments and grave markers, piling, terrazzo steps, and well curbing.

## GLASS

[A preliminary report for this industry was issued Oct. 15, 1934]

**Description of the industry.**—This industry embraces establishments engaged primarily in the manufacture of glass from raw materials, and does not include beveling glass, bending sheet glass, engraving glass, making glass labels, staining and ornamenting glass, or making glassware from purchased "blanks," except to the extent to which these activities are carried on by the same establishments in which the glass is manufactured. Small amounts of cutting and decorating are reported by establishments in the "Glass" industry, but most of these lines of work are done in the "Mirrors and other glass products made of purchased glass" industry.

**Extent of coverage.**—The census coverage of this industry was substantially complete. Of the 229 establishments that reported for 1931, only 2 failed to supply any information in regard to their status (active, idle, etc.) or activities in 1933; and these establishments accounted for only a minor fraction of 1 percent of the total number of wage earners and of the total value of products reported for this industry for 1931.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES 1933 AND 1931

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
<i>Thousands of dollars. (See sec. 25, p. 13)</i>								
<i>United States</i>								
1933.....	213	4,500	49,797	8,696	45,222	63,410	191,948	128,538
1931.....	229	( <sup>4</sup> )	49,917	( <sup>4</sup> )	57,882	73,575	216,265	142,690
1929.....	263	5,869	67,527	15,587	87,795	103,294	303,819	200,625
1927.....	269	5,629	65,825	13,854	81,855	106,911	282,394	172,483
<i>States</i>								
California:								
1933.....	12	127	1,266	302	1,356	2,466	7,422	4,956
1931.....	12	( <sup>4</sup> )	1,304	( <sup>4</sup> )	1,987	2,540	7,394	4,854
Illinois:								
1933.....	11	383	2,933	659	2,976	4,622	14,851	10,229
1931.....	13	( <sup>4</sup> )	3,363	( <sup>4</sup> )	4,405	5,754	19,483	13,729
Indiana:								
1933.....	19	407	5,161	913	4,249	7,567	22,521	14,954
1931.....	24	( <sup>4</sup> )	4,930	( <sup>4</sup> )	5,402	8,971	28,086	19,115
Maryland:								
1933.....	6	89	1,059	179	979	984	3,465	2,481
1931.....	6	( <sup>4</sup> )	1,384	( <sup>4</sup> )	1,379	1,030	3,266	2,236
New Jersey:								
1933.....	6	302	3,278	634	2,803	3,458	13,164	9,706
1931.....	8	( <sup>4</sup> )	3,222	( <sup>4</sup> )	3,641	3,489	12,534	9,046
New York:								
1933.....	11	526	2,725	1,105	2,676	3,286	11,128	7,842
1931.....	13	( <sup>4</sup> )	2,512	( <sup>4</sup> )	3,256	3,315	11,589	8,274
Ohio:								
1933.....	22	630	8,535	1,238	7,949	10,008	30,931	20,974
1931.....	24	( <sup>4</sup> )	7,661	( <sup>4</sup> )	8,778	11,382	32,083	20,702
Oklahoma:								
1933.....	11	86	1,282	192	1,140	2,078	4,850	2,772
1931.....	11	( <sup>4</sup> )	956	( <sup>4</sup> )	1,168	2,095	4,309	2,214
Pennsylvania:								
1933.....	55	1,041	12,617	1,862	11,073	15,274	43,542	28,268
1931.....	61	( <sup>4</sup> )	12,992	( <sup>4</sup> )	14,408	18,675	50,335	31,660
West Virginia:								
1933.....	43	638	8,752	1,050	7,927	11,102	31,325	20,223
1931.....	41	( <sup>4</sup> )	8,670	( <sup>4</sup> )	9,814	10,802	32,444	21,642
Other States: <sup>5</sup>								
1933.....	17	271	2,189	501	2,097	2,555	8,607	6,132
1931.....	16	( <sup>4</sup> )	2,923	( <sup>4</sup> )	3,643	5,522	14,741	9,219

<sup>1</sup> Not including proprietors and firm members, as follows: 1933, 19; 1931, no data; 1929, 31; 1927, 79.<sup>2</sup> The figures for 1933 do not include data for numbers and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.<sup>3</sup> Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.<sup>4</sup> No data.<sup>5</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Ark., 3, 2; Fla., 1, 1; La., 1, 2; Mass., 1, 1; Mich., 0, 1; Minn., 0, 1; Miss., 1, 0; Mo., 1, 1; R. I., 1, 1; S. C., 1, 1; Tenn., 3, 2; Tex., 3, 3; Wash., 1, 0.

TABLE 2.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, 1933 AND 1931, AND BY KIND AND QUANTITY, 1929, FOR THE UNITED STATES

	1933	1931 comparable with 1933 <sup>1</sup>	1931 as published
1. Glass industry, all products, total value.....	\$191, 947, 716		\$216, 264, 830
2. Glass and glassware.....	184, 509, 109	\$208, 608, 897	211, 955, 360
3. Other products, not normally belonging to the industry.....	3, 781, 455	4, 268, 069	4, 309, 470
4. Glass and glassware and other products, not reported separately (on abbreviated schedule) <sup>2</sup> .....	3, 657, 152		

  

	QUANTITY <sup>3</sup>				VALUE IN THOUSANDS OF DOLLARS <sup>3</sup>	
	1933 reported on stand- ard sched- ule <sup>2</sup>	1931 com- parable with 1933 <sup>1</sup>	1931 as pub- lished: com- parable with 1929	1929	1933 reported on stand- ard sched- ule <sup>2</sup>	1931 com- parable with 1933 <sup>1</sup>
Glass and glassware:						
Aggregate value.....					184, 509	208, 604
Pressed and blown glass (except containers):	<i>M doz.</i>	<i>M doz.</i>	<i>M doz.</i>	<i>M doz.</i>		
Tableware and ovenware.....					10, 816	13, 284
Pressed tumblers and goblets.....	11, 252	8, 141	8, 334	17, 542	4, 272	2, 505
Blown tumblers, stem ware, and bar goods.....					10, 318	7, 723
Lenses:						
Motor-vehicle.....	675	1, 239	1, 398	2, 321	421	824
Other.....					279	450
Lamps.....					489	486
Lamp chimneys.....	1, 876	1, 158	1, 597	3, 019	990	868
Lantern globes.....	281	301	404	942	230	239
Shades, globes, and other gas and electric goods (except electric bulbs and insulators).....					3, 580	6, 109
Tubing.....	<i>M lbs.</i>	<i>M lbs.</i>	<i>M lbs.</i>	<i>M lbs.</i>		
Insulators.....	14, 270	17, 165	17, 292	23, 067	2, 575	3, 115
Opal ware, other than containers.....						807
Bulbs for electric lamps, specialties, and other pressed- and blown-glass products.....					11, 478	456
Glass containers:						17, 472
Group 1—Food-product containers:	<i>M gross</i>	<i>M gross</i>	<i>M gross</i>	<i>M gross</i>		
Milk bottles.....	1, 960	2, 135	2, 136	2, 610	9, 181	10, 028
Blown packers' ware, narrow-neck and wide-mouth.....	9, 355	8, 954	8, 976	9, 445	25, 462	25, 719
Pressed packers' ware.....		822	822	761		1, 862
Fruit jars (home-pack).....	1, 540	2, 082	2, 082	1, 153	9, 369	15, 103
Group 2—Beverage containers:						
Pressure ware.....	6, 061	3, 532	3, 538	4, 130	20, 069	13, 068
Nonpressure ware.....	467	577	577	437	1, 500	2, 545
Group 3—Medicinal and toilet-preparation containers (both pressed and blown).....	14, 120	12, 765	12, 765	15, 792	28, 784	30, 280
Group 4—General-purpose containers.....	1, 323	1, 006	1, 029	1, 358	3, 997	6, 515
Window glass.....	<i>M sq. ft.</i>	<i>M sq. ft.</i>	<i>M sq. ft.</i>	<i>M sq. ft.</i>		
Obscured glass, including cathedral and skylight glass and opalescent sheet glass.....	249, 442	258, 217	266, 772	402, 559	10, 457	9, 998
Wire glass, rough and polished.....	10, 858	15, 659	17, 796	34, 294	2, 591	2, 137
Polished plate glass.....		14, 802	15, 664	42, 817		1, 713
Other glass products.....					26, 702	25, 765

<sup>1</sup> See sec. 5c, p. 4. The figures given in this column represent the production, in 1931, of those classes of establishments (not in all cases the same individual establishments) which reported on the standard schedule for 1933.

<sup>2</sup> See sec. 5c, p. 4.

<sup>3</sup> See sec. 26, p. 13.

TABLE 3.—WAGE EARNERS, BY QUARTERS, FOR SELECTED STATES: 1933 AND 1931

[The average for the year (table 1) differs from the average of the quarterly figures below. (See fourth sentence, sec. 13, p. 8.) See sec. 26, p. 13]

	1933 <sup>1</sup>				1931			
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
United States.....	40,311	49,931	56,798	58,783	51,529	52,296	50,476	46,506
States								
Arkansas.....	221	295	430	331	(?)	(?)	(?)	(?)
California.....	1,010	1,312	1,433	1,553	1,377	1,425	1,234	1,098
Illinois.....	2,401	3,188	3,245	3,157	3,553	3,901	3,029	2,620
Indiana.....	3,963	5,552	5,832	6,026	4,614	5,258	5,745	4,743
Maryland.....	908	1,066	1,163	1,188	1,434	1,381	1,309	1,394
New Jersey.....	2,758	3,123	3,736	4,163	3,209	3,390	3,158	2,807
New York.....	2,190	2,644	3,156	3,174	2,549	2,593	2,433	2,589
Ohio.....	6,840	8,900	8,837	10,575	7,702	7,677	7,979	7,755
Oklahoma.....	991	1,363	1,499	1,442	822	1,101	1,013	956
Pennsylvania.....	10,558	12,551	14,707	14,340	13,542	13,542	13,115	11,685
Tennessee.....	212	296	321	371	(?)	(?)	(?)	(?)
Texas.....	159	183	167	170	135	211	142	232
West Virginia.....	7,064	8,133	10,360	10,710	9,530	8,895	8,671	8,346

<sup>1</sup> See sec. 5, p. 4, and sec. 13, p. 8. The 170 establishments canvassed with the standard schedule reported wage earners, by months, as follows:

January.....	36,700	May.....	43,833	September.....	54,329
February.....	37,780	June.....	47,935	October.....	55,036
March.....	38,744	July.....	50,899	November.....	56,214
April.....	40,330	August.....	54,119	December.....	56,427

<sup>1</sup> Withheld to avoid disclosing data for individual establishments.

## MARBLE, GRANITE, SLATE, AND OTHER STONE PRODUCTS

[A preliminary report for this industry was issued on Oct. 30, 1934]

**Description of the industry.**—This industry classification covers establishments engaged primarily in cutting, shaping, and finishing marble, granite, slate, and other stone for building, monumental, and miscellaneous uses. The census does not cover the numerous small yards which are engaged in the purchase and sale of finished or partly finished monuments and tombstones but which do no work on them except lettering and finishing to individual order. The manufacture of grindstones, pulpstones, hones, and whetstones is not included in this industry.

**Inclusion of data for quarrying for certain establishments.**—The quarrying and the finishing of stone are carried on to some extent by the same establishments. In some cases the returns covered both quarrying and manufacturing operations, and, although every effort was made to eliminate the data for quarrying, it was not always possible to do so. Of the 1,881 establishments that reported for this industry for 1929, 201, or 10.7 percent, included data for quarrying. (No corresponding figures are available for years subsequent to 1929.) These establishments employed 9,102, or 24.1 percent, of the wage earners and accounted for \$24,387,680, or 12.7 percent, of the total value of products. The actual number of wage earners employed in the quarrying operations alone, and the value of the quarried products intended for sale as such, were not reported separately.

**Extent of coverage.**—The 1933 coverage of the establishments reporting in this industry for 1931 was practically complete. Although 68 of the 1,588 such establishments failed to supply any information in regard to their status (active, idle, etc.) or their activities in 1933, these establishments accounted for only 1.3 percent of the total number of wage earners and of the total value of products reported for the industry.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1,2</sup>	Number of wage earners (average for the year)	Salaries <sup>3</sup>	Wages	Cost of contract work	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>4</sup>
Thousands of dollars. (See sec. 25, p. 13)									
<i>United States</i>									
1933.....	1,129	2,302	16,541	3,715	16,760	1,212	17,777	55,041	37,264
1931.....	1,588	( <sup>4</sup> )	27,700	( <sup>4</sup> )	41,651	2,200	34,405	119,395	84,990
1929.....	1,881	5,916	37,817	18,496	63,041	( <sup>4</sup> )	87,638	192,164	134,526
1927.....	1,978	6,033	40,474	16,719	68,491	( <sup>4</sup> )	66,328	201,181	134,853
<i>States</i>									
Arkansas:									
1933.....	5	3	21	4	18	-----	32	77	46
1931.....	7	( <sup>4</sup> )	44	( <sup>4</sup> )	50	-----	67	104	127
California:									
1933.....	45	68	327	96	342	34	401	1,173	772
1931.....	55	( <sup>4</sup> )	555	( <sup>4</sup> )	912	27	786	2,728	1,942
Colorado:									
1933.....	11	12	59	17	67	-----	107	250	142
1931.....	14	( <sup>4</sup> )	98	( <sup>4</sup> )	177	3	131	436	305
Connecticut:									
1933.....	19	21	99	25	123	-----	162	453	291
1931.....	30	( <sup>4</sup> )	245	( <sup>4</sup> )	452	18	517	1,529	1,011
Delaware:									
1933.....	3	4	10	5	6	-----	17	33	17
1931.....	4	( <sup>4</sup> )	17	( <sup>4</sup> )	22	-----	32	88	56
District of Columbia:									
1933.....	3	-----	8	-----	11	-----	16	36	19
1931.....	5	( <sup>4</sup> )	59	( <sup>4</sup> )	97	18	119	278	159
Florida:									
1933.....	3	4	25	3	18	-----	23	71	48
1931.....	6	( <sup>4</sup> )	81	( <sup>4</sup> )	106	2	79	249	171
Georgia:									
1933.....	39	130	1,811	183	1,053	89	970	3,367	2,398
1931.....	50	( <sup>4</sup> )	1,913	( <sup>4</sup> )	1,877	406	1,576	6,382	4,806
Illinois:									
1933.....	46	75	248	98	262	16	442	1,222	780
1931.....	79	( <sup>4</sup> )	600	( <sup>4</sup> )	1,118	25	1,266	3,699	2,433
Indiana:									
1933.....	35	260	1,701	520	1,897	80	1,716	6,047	4,330
1931.....	48	( <sup>4</sup> )	2,240	( <sup>4</sup> )	3,535	67	2,654	9,928	7,274
Iowa:									
1933.....	4	4	26	6	22	-----	26	92	66
1931.....	14	( <sup>4</sup> )	95	( <sup>4</sup> )	138	-----	199	540	341
Kansas:									
1933.....	6	11	39	14	44	3	78	240	163
1931.....	11	( <sup>4</sup> )	61	( <sup>4</sup> )	99	2	125	353	228
Kentucky:									
1933.....	12	24	109	45	102	1	127	389	263
1931.....	18	( <sup>4</sup> )	129	( <sup>4</sup> )	159	4	196	661	464
Louisiana:									
1933.....	10	22	76	30	66	28	87	275	188
1931.....	10	( <sup>4</sup> )	110	( <sup>4</sup> )	137	( <sup>4</sup> )	95	433	338
Maine:									
1933.....	17	34	389	61	459	( <sup>4</sup> )	169	820	651
1931.....	20	( <sup>4</sup> )	709	( <sup>4</sup> )	1,153	4	206	1,967	1,761
Maryland:									
1933.....	41	34	205	60	222	13	333	928	595
1931.....	25	( <sup>4</sup> )	376	( <sup>4</sup> )	730	( <sup>4</sup> )	668	2,012	1,344
Massachusetts:									
1933.....	101	110	806	195	1,019	34	879	3,095	2,216
1931.....	130	( <sup>4</sup> )	1,524	( <sup>4</sup> )	2,587	149	1,583	6,721	5,138
Michigan:									
1933.....	16	24	83	32	73	16	109	307	198
1931.....	34	( <sup>4</sup> )	287	( <sup>4</sup> )	448	89	685	1,738	1,053
Minnesota:									
1933.....	52	138	1,159	181	1,085	103	1,079	3,442	2,363
1931.....	61	( <sup>4</sup> )	1,442	( <sup>4</sup> )	1,869	20	1,435	5,835	4,400
Missouri:									
1933.....	26	46	322	67	326	3	319	883	565
1931.....	38	( <sup>4</sup> )	716	( <sup>4</sup> )	999	17	873	2,722	1,849
Montana:									
1933.....	5	8	16	9	19	-----	10	44	34
1931.....	5	( <sup>4</sup> )	31	( <sup>4</sup> )	46	-----	17	110	92
Nebraska:									
1933.....	7	14	55	18	51	-----	71	201	130
1931.....	8	( <sup>4</sup> )	85	( <sup>4</sup> )	141	19	197	606	409

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of contract work	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
Thousands of dollars. (See sec. 25, p. 13)									
<i>States—Continued</i>									
New Hampshire:									
1933.....	15	23	303	45	436	62	124	818	694
1931.....	20	( <sup>4</sup> )	485	( <sup>4</sup> )	945	107	332	1,754	1,422
New Jersey:									
1933.....	15	22	133	32	227	26	226	655	429
1931.....	39	( <sup>4</sup> )	398	( <sup>4</sup> )	1,024	235	919	3,029	2,110
New York:									
1933.....	136	235	1,259	438	2,054	194	2,446	7,068	4,621
1931.....	212	( <sup>4</sup> )	3,084	( <sup>4</sup> )	7,399	545	6,463	21,042	14,579
North Carolina:									
1933.....	22	39	370	57	294	18	260	888	628
1931.....	28	( <sup>4</sup> )	707	( <sup>4</sup> )	824	163	603	2,238	1,635
Ohio:									
1933.....	45	120	659	190	597	4	765	2,058	1,293
1931.....	58	( <sup>4</sup> )	1,125	( <sup>4</sup> )	1,493	10	1,176	4,528	3,352
Oklahoma:									
1933.....	14	12	71	9	51	-----	82	214	133
1931.....	12	( <sup>4</sup> )	92	( <sup>4</sup> )	140	-----	211	490	279
Oregon:									
1933.....	8	8	39	8	40	-----	33	135	103
1931.....	11	( <sup>4</sup> )	64	( <sup>4</sup> )	100	-----	71	286	214
Pennsylvania:									
1933.....	108	146	1,303	233	1,047	39	1,099	3,278	2,179
1931.....	160	( <sup>4</sup> )	2,670	( <sup>4</sup> )	3,034	82	2,420	7,899	5,478
Rhode Island:									
1933.....	10	17	141	21	213	2	176	452	276
1931.....	13	( <sup>4</sup> )	213	( <sup>4</sup> )	394	15	255	906	651
South Carolina:									
1933.....	9	18	86	20	71	-----	92	250	158
1931.....	10	( <sup>4</sup> )	99	( <sup>4</sup> )	105	1	94	326	232
Tennessee:									
1933.....	18	71	998	136	855	163	1,320	3,254	1,934
1931.....	26	( <sup>4</sup> )	1,099	( <sup>4</sup> )	1,067	3	1,307	3,868	2,551
Texas:									
1933.....	41	46	255	74	216	14	245	753	508
1931.....	52	( <sup>4</sup> )	322	( <sup>4</sup> )	377	7	420	1,434	1,015
Vermont:									
1933.....	97	321	2,301	510	2,533	156	2,894	8,656	5,763
1931.....	162	( <sup>4</sup> )	3,582	( <sup>4</sup> )	5,375	138	4,558	14,763	10,206
Virginia:									
1933.....	21	21	197	22	136	-----	98	375	276
1931.....	21	( <sup>4</sup> )	690	( <sup>4</sup> )	507	-----	430	1,347	917
Washington:									
1933.....	10	13	69	21	79	4	61	243	182
1931.....	15	( <sup>4</sup> )	123	( <sup>4</sup> )	175	3	108	513	346
Wisconsin:									
1933.....	35	87	332	137	280	88	337	1,218	881
1931.....	48	( <sup>4</sup> )	902	( <sup>4</sup> )	1,107	17	943	3,321	2,378
Other States: <sup>5</sup>									
1933.....	19	57	433	93	343	23	345	1,279	934
1931.....	30	( <sup>4</sup> )	628	( <sup>4</sup> )	739	4	527	2,452	1,926

<sup>1</sup> Not including proprietors and firm members, as follows: 1933, 755; 1931, no data; 1929, 1,525; 1927, 1,694.<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.<sup>4</sup> No data.<sup>5</sup> Less than \$500.<sup>6</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Ala., 10, 13; Idaho, 0, 2; Miss., 3, 4; N. Dak., 1, 1; S. Dak., 2, 3; Utah, 3, 5; W. Va., 0, 2.



TABLE 2.—WAGE EARNERS, BY QUARTERS, FOR SELECTED STATES: 1933 AND 1931

[The average for the year (table 1) differs from the average of the quarterly figures below. (See fourth sentence, sec. 13, p. 8.) See sec. 26, p. 13]

	1933 <sup>1</sup>				1931			
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
United States.....	15,550	17,145	18,623	15,676	28,594	28,905	28,194	23,780
<i>States</i>								
Alabama.....	367	327	303	213	430	459	531	475
Arkansas.....	22	15	23	28	38	57	46	36
California.....	359	353	328	286	634	510	528	494
Colorado.....	63	71	56	42	112	100	90	68
Connecticut.....	82	118	121	87	183	283	282	180
Delaware.....	10	7	7	7	15	15	19	25
District of Columbia.....	8	9	7	6	58	75	57	33
Florida.....	19	22	28	31	72	75	87	84
Georgia.....	1,832	1,779	1,823	1,732	2,027	2,022	1,908	1,653
Illinois.....	182	280	283	248	604	655	594	470
Indiana.....	1,667	1,779	1,879	1,500	2,578	2,192	1,949	2,535
Iowa.....	14	30	31	24	91	113	90	70
Kansas.....	42	38	35	45	74	67	65	43
Kentucky.....	84	122	118	114	132	136	136	111
Louisiana.....	97	67	84	64	131	96	111	82
Maine.....	260	534	451	261	373	986	917	358
Maryland.....	199	222	211	200	335	341	427	385
Massachusetts.....	719	887	849	828	1,468	1,700	1,594	1,219
Michigan.....	78	79	119	65	296	272	285	246
Minnesota.....	807	962	1,673	1,326	1,472	1,511	1,472	1,265
Mississippi.....	41	44	47	44	35	40	67	67
Missouri.....	316	322	334	346	738	687	766	694
Montana.....	15	20	17	13	25	30	39	23
Nebraska.....	45	55	69	44	74	76	95	72
New Hampshire.....	416	261	331	181	463	534	533	435
New Jersey.....	195	98	114	123	499	354	362	382
New York.....	1,310	1,250	1,301	1,167	3,384	3,085	2,985	2,410
North Carolina.....	364	361	435	392	715	799	869	495
Ohio.....	516	749	726	639	1,217	1,188	1,090	875
Oklahoma.....	66	81	94	49	78	84	96	71
Oregon.....	30	40	40	46	73	69	70	46
Pennsylvania.....	1,154	1,438	1,425	1,232	2,590	2,886	2,894	2,264
Rhode Island.....	116	163	172	141	178	270	221	218
South Carolina.....	83	89	91	81	101	101	97	98
Tennessee.....	916	1,039	1,075	923	1,067	1,093	1,128	1,035
Texas.....	242	208	289	303	342	326	317	287
Utah.....	18	17	23	42	31	77	62	38
Vermont.....	2,261	2,640	2,746	2,311	3,965	3,610	3,471	2,935
Virginia.....	86	115	377	96	738	725	750	749
Washington.....	99	36	56	70	137	117	115	127
Wisconsin.....	303	371	385	290	951	1,045	911	562

<sup>1</sup> See sec. 5, p. 4, and sec. 13, p. 8. The 915 establishments canvassed with the standard schedule reported wage earners, by months, as follows:

January.....	13,238	May.....	15,227	September.....	17,890
February.....	13,851	June.....	16,418	October.....	17,618
March.....	14,901	July.....	17,371	November.....	16,457
April.....	14,468	August.....	17,670	December.....	14,986

## **Group 11.—IRON AND STEEL AND THEIR PRODUCTS, NOT INCLUDING MACHINERY**

### **THE GROUP AS A WHOLE**

[See p. 39]

Group 11 comprises two subgroups, namely: (1) Crude iron and steel rolled products, and (2) other iron and steel products except those classified in groups 13, 14, and 15. The industries in the second subgroup use as their principal materials the products of those in the first subgroup, and as a result the total cost of materials and the total value of products for the group as a whole include large amounts of duplication.

Establishments which roll iron and steel and operate departments for further processing the rolled products, such as wrought pipe, bolts and nuts, wire, and tin plate and terneplate, are assigned in their entirety to the "Steel-works and rolling-mill products" industry, except that blast-furnace departments are classified separately. The several industries which constitute the subgroup "Other iron and steel products" embrace establishments operated entirely independently of rolling mills, although some of them are under the same ownership. Thus the statistics for certain of these industries by no means indicate the full extent of the manufacturing operations carried on in producing the various classes of commodities covered by the industry designations. In the detailed product tables, however, value figures, and in many cases quantity figures also, are given, so far as data are available, covering the total output of the individual classes of commodities, whether made in plants operated in connection with rolling mills or in plants classified in other industries.

**Change in classification.**—Establishments engaged primarily in repairing and replacing motor-vehicle springs, formerly classified in the "Springs, steel, except wire, not made in plants operated in connection with rolling mills" industry, are not now treated, for census purposes, as manufacturing establishments. The figures for such establishments have been subtracted from the 1931 figures for this industry, and the remainders are given, in italics, for comparison with 1933, in the table beginning on page 426.

**SUMMARY FOR GROUP 11.—IRON AND STEEL AND THEIR PRODUCTS, NOT  
INCLUDING MACHINERY: 1927 TO 1933**

INDUSTRY	Cen- sus year	Num- ber of estab- lish- ments	Wage earn- ers (aver- age for the year)	Wages	Cost of ma- terials, con- tainers, fuel, and pur- chased elec- tric energy	Value of products	Value added by manu- facture†
<b>Aggregate for the group.</b>	1933	5,133	554,108	\$500,879,049	\$1,400,829,861	\$2,463,000,843	\$1,062,170,982
	1931	5,965	597,953	705,125,215	1,806,370,391	3,277,405,752	1,471,035,861
	1929	6,640	880,882	1,380,986,821	3,802,873,486	7,137,928,058	3,275,054,572
	1927	6,340	834,967	1,263,812,344	3,544,615,007	6,197,594,589	2,652,979,522
<b>Crude iron and steel and rolled products, total.</b>	1933	466	288,945	270,366,649	876,045,503	1,357,574,304	481,528,861
	1931	526	278,206	357,645,332	1,091,015,446	1,714,214,281	623,198,895
	1929	591	419,534	730,974,110	2,514,376,848	4,137,214,200	1,622,837,421
	1927	602	389,270	645,533,998	2,269,210,331	3,488,744,476	1,218,534,145
<b>Blast-furnace products.....</b>	1933	72	12,098	11,563,675	183,956,580	213,685,290	20,728,710
	1931	80	13,572	19,258,799	259,131,549	311,371,093	52,239,544
	1929	105	24,960	41,958,569	610,263,691	771,425,464	161,131,773
	1927	116	27,958	44,268,499	579,555,036	708,904,238	129,849,202
<b>Steel-works and rolling-mill products (including all de- partments, such as bolt and nut, wire, tin plate, etc.)</b>	1933	394	276,847	258,802,974	692,088,923	1,143,889,074	451,800,151
	1931	448	264,634	338,886,533	831,888,897	1,402,843,188	570,059,291
	1929	486	394,574	689,015,541	1,904,089,157	3,365,788,805	1,461,705,648
	1927	486	361,312	601,275,499	1,689,655,295	2,779,840,238	1,090,184,943
<b>Other iron and steel products, total.</b>	1933	4,667	265,166	230,012,400	524,784,358	1,105,426,479	530,642,121
	1931	5,439	319,747	347,479,883	715,354,945	1,563,191,471	847,830,526
	1929	6,049	461,348	650,012,711	1,348,496,638	3,000,713,789	1,652,217,151
	1927	5,738	445,697	618,273,346	1,276,404,736	2,708,850,113	1,433,445,377
<b>Iron and steel products ex- clusive of those made in steel works and rolling mills or in plants operated in connection with rolling mills:</b>							
Bolts, nuts, washers, and rivets. <sup>2</sup>	1933	103	8,486	7,155,009	15,350,425	32,873,719	17,523,294
	1931	116	10,518	10,176,637	16,872,487	39,433,131	22,610,644
	1929	117	16,175	22,115,532	44,211,785	102,392,099	58,180,314
	1927	115	13,614	17,324,418	38,801,814	75,876,170	37,574,356
Forgings. <sup>2</sup> .....	1933	181	7,953	7,354,390	16,895,827	32,523,029	15,627,202
	1931	202	9,971	11,443,854	22,656,979	47,699,672	25,042,693
	1929	218	20,882	34,505,349	71,606,964	156,248,947	84,641,983
	1927	219	15,594	23,539,551	52,101,995	105,035,719	52,933,724
Galvanizing and other coating. <sup>3</sup>	1933	54	761	661,297	1,163,523	2,690,783	1,527,260
	1931	60	1,011	1,170,056	1,668,996	4,060,302	2,391,306
	1929	65	1,125	1,563,716	3,939,417	7,665,541	3,727,124
	1927	59	953	1,448,940	3,722,411	6,950,855	3,228,444
Iron and steel, pro- cessed. <sup>4</sup>	1929	46	511	878,459	1,088,672	3,865,480	2,776,806
	1927	33	231	392,273	509,690	1,443,289	933,599
Nails, spikes, etc. <sup>2</sup> (ex- clusive of those made in the "Wire drawn from purchased rods" industry.)	1933	39	1,695	1,589,654	2,704,013	6,973,275	4,269,262
	1931	46	1,570	1,670,306	2,981,668	6,827,854	3,846,186
	1929	55	2,027	2,553,417	5,955,661	12,854,745	6,899,084
	1927	56	2,100	2,670,016	5,166,906	11,753,488	6,596,562
Springs, steel, except wire. <sup>2</sup>	1933	60	2,112	1,971,871	5,543,128	10,412,560	4,869,432
	1931	77	2,561	3,100,689	6,368,512	12,614,312	6,247,800
	1929	98	2,938	3,633,836	7,541,098	15,157,727	7,616,629
	1927	86	5,842	9,313,927	25,372,478	46,672,319	21,299,841
		94	5,753	8,912,961	24,598,568	43,820,633	19,222,065
Structural and ornamen- tal metal work. <sup>3</sup>	1933	962	21,377	18,624,134	63,169,061	107,612,309	44,443,248
	1931	1,302	37,510	47,874,684	131,648,905	238,033,284	106,384,379
	1929	1,452	54,947	87,785,606	244,696,254	477,036,827	232,340,573
	1927	1,284	52,892	84,578,048	243,446,072	440,376,360	196,930,288
Wrought pipe, welded and heavy riveted. <sup>3</sup>	1933	44	6,552	5,579,736	20,821,333	34,956,654	14,135,321
	1931	51	8,045	9,889,930	42,291,098	75,040,579	32,749,481
	1929	50	11,417	18,762,303	70,120,941	124,658,965	54,538,025
	1927	44	11,083	16,066,001	55,778,864	98,186,341	42,407,477

For footnotes, see end of table.

## SUMMARY FOR GROUP 11.—IRON AND STEEL AND THEIR PRODUCTS, NOT INCLUDING MACHINERY: 1927 TO 1933—Continued

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>1</sup>
Cast-iron pipe and fittings...	1933	71	9,454	\$5,847,187	\$8,991,820	\$20,915,752	\$11,923,932
	1931	78	16,066	14,558,947	20,977,433	47,937,502	26,960,069
	1929	72	19,741	22,561,778	34,289,365	80,260,550	45,971,185
	1927	82	22,892	25,982,196	48,224,970	95,088,622	46,863,652
Doors, shutters, and window-sash and frames, molding, and trim, metal.	1933	125	3,572	3,123,156	5,953,312	13,376,591	7,423,279
	1931	139	6,816	8,897,727	14,572,103	35,608,399	21,036,296
	1929	148	9,557	17,065,422	30,178,161	72,160,888	41,982,227
	1927	117	8,056	15,564,458	25,602,288	65,279,973	39,077,735
Firearms.....	1933	22	3,382	3,163,648	2,169,325	9,214,095	7,044,767
	1931	24	4,204	4,710,580	2,501,397	10,611,146	8,109,749
	1929	21	6,838	9,209,551	4,117,096	21,970,367	17,853,268
	1927	20	6,136	7,938,689	5,047,555	19,452,372	14,404,817
Hardware not elsewhere classified.	1933	381	32,550	26,937,132	30,040,181	85,077,477	55,037,296
	1931	451	36,116	37,269,297	38,818,046	115,900,200	77,582,244
	1929	486	62,806	67,702,255	70,480,210	229,477,507	152,997,297
	1927	486	47,834	60,827,474	71,877,055	208,253,586	136,376,531
Plumbers' supplies, not including pipe or vitreous-china sanitary ware.	1933	232	15,893	12,921,717	17,561,800	46,885,998	29,324,698
	1931	238	19,688	20,440,001	26,003,009	70,935,892	44,932,883
	1929	255	27,960	37,068,997	49,032,599	129,673,784	80,641,185
	1927	231	29,245	40,212,198	55,693,327	145,262,311	89,628,984
Safes and vaults.....	1933	21	933	643,411	937,557	2,017,905	1,980,248
	1931	25	2,044	2,176,226	4,073,014	11,606,575	7,933,561
	1929	27	3,033	4,438,698	6,892,461	19,362,192	12,969,731
	1927	25	3,386	4,494,497	7,226,295	18,439,550	11,213,255
Screw-machine products and wood screws.	1933	255	10,236	8,980,979	13,485,124	33,449,458	19,964,324
	1931	275	12,047	13,478,221	16,141,995	48,697,573	27,555,878
	1929	273	19,881	28,986,604	39,462,568	105,974,062	66,512,094
	1927	218	13,690	18,055,096	25,910,228	60,020,261	34,110,038
Steam-and-hot-water heating apparatus and steam fittings.	1933	227	22,301	19,541,144	20,060,855	69,234,058	49,173,203
	1931	238	28,996	29,557,784	29,704,072	102,500,918	72,796,846
	1929	240	39,621	58,974,874	72,708,268	228,310,254	155,601,986
	1927	232	42,893	64,851,149	76,835,267	225,158,390	148,323,123
Steel barrels, kegs, and drums	1933	58	6,517	6,025,934	18,035,099	*30,399,426	12,364,327
	1931	52	3,253	3,512,696	12,989,820	21,644,288	8,654,468
	1929	53	4,110	5,769,097	21,946,659	37,825,027	15,878,468
	1927	39	2,853	3,985,629	14,735,518	24,104,669	9,369,151
Stoves and ranges (other than electric) and warm-air furnaces.	1933	543	30,193	26,968,953	46,283,536	117,736,718	71,453,182
	1931	589	32,580	35,274,920	61,833,221	169,106,093	107,272,872
	1929	609	46,616	65,146,509	100,747,049	271,747,009	170,969,960
	1927	564	45,180	64,327,405	93,095,971	258,285,820	165,189,858
Tin cans and other tinware not elsewhere classified.	1933	194	23,343	22,692,907	137,046,144	207,946,457	70,900,313
	1931	199	25,271	27,977,932	149,121,078	223,634,271	74,513,193
	1929	232	31,497	38,173,246	194,986,803	296,901,426	101,814,623
	1927	236	29,721	35,000,822	169,421,340	253,478,691	84,057,351
Tools and cutlery:							
Cutlery (not including silver and plated cutlery) and edge tools.	1933	200	10,807	8,847,633	8,646,969	38,717,841	30,070,872
	1931	221	12,485	12,194,016	8,983,219	52,336,936	43,353,717
	1929	239	14,901	17,651,292	14,789,335	78,660,872	63,871,537
	1927	230	*15,832	*18,892,154	*18,180,385	76,688,444	*68,508,059
Files.....	1933	23	2,634	2,431,430	1,566,964	7,390,900	5,823,936
	1931	26	3,016	2,718,942	1,220,740	7,316,062	6,085,822
	1929	33	3,974	5,239,808	3,052,675	14,114,378	11,061,703
	1927	36	3,948	5,144,987	3,135,955	12,973,784	9,837,779
Saws.....	1933	71	2,528	2,347,202	3,003,071	9,926,388	6,923,317
	1931	78	3,005	3,083,728	4,034,969	11,572,385	7,537,416
	1929	81	4,137	5,727,416	6,884,331	22,614,958	15,780,627
	1927	77	4,182	5,753,856	7,674,394	22,627,990	14,953,596
Tools, not including edge tools, machine tools, files, or saws.	1933	294	9,598	8,157,961	10,520,871	34,199,007	23,678,136
	1931	355	10,833	11,208,740	13,724,818	42,416,060	28,691,842
	1929	534	19,305	25,808,289	32,110,507	99,462,032	67,351,525
	*1927	405	16,447	20,941,443	28,057,884	76,607,237	48,549,353

For footnotes, see end of table.

**SUMMARY FOR GROUP 11.—IRON AND STEEL AND THEIR PRODUCTS, NOT  
INCLUDING MACHINERY: 1927 TO 1933—Continued**

INDUSTRY	Cen- sus year	Num- ber of estab- lish- ments	Wage earners (aver- age for the year)	Wages	Cost of ma- terials, con- tainers, fuel, and pur- chased elec- tric energy	Value of products	Value added by manu- facture <sup>1</sup>
Wire drawn from purchased rods (covers fabricated wire products made in the same establishments). <sup>2</sup>	1933	78	14,656	\$14,321,233	\$39,614,635	\$75,475,581	\$35,860,946
	1931	82	14,476	17,179,057	45,187,263	83,370,125	38,182,862
	1929	81	22,467	35,110,335	128,182,429	213,997,410	87,814,981
	1927	73	19,866	30,038,299	128,092,414	190,709,790	62,617,376
Wirework, not elsewhere classified.	1933	429	17,633	14,154,682	35,220,272	74,520,498	39,300,226
	1931	494	17,226	17,381,566	40,307,517	86,693,807	40,386,290
	1929	547	22,388	27,912,231	68,144,047	146,805,049	78,661,002
	1927	512	21,697	26,439,144	69,093,221	128,535,783	65,442,562

<sup>1</sup> Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.

<sup>2</sup> Similar products are manufactured to a large extent by steel works and rolling mills or by plants operated in connection with rolling mills. The figures here given refer only to establishments engaged primarily in the manufacture of specified classes of products.

<sup>3</sup> Largely custom work.

<sup>4</sup> Abandoned as a separate classification at the census for 1931; now included in "Foundry and machine-shop products," Group 13.

<sup>5</sup> Adjusted for comparison with 1933. See "Change in classification," p. 425.

<sup>6</sup> As originally published; comparable with 1929 and 1927.

<sup>7</sup> Cost of foundry supplies not included for 1929 but included for other years.

<sup>8</sup> Revised; revision not carried into total for subgroup or aggregate for group.

<sup>9</sup> Because of the transfer of certain establishments from this to another industry at the census for 1929, the figures for 1927 are not strictly comparable with those for 1929 and subsequent years.

\* Includes \$6,123,229, value of miscellaneous products and receipts, but does not include \$6,029,411, value of steel barrels, kegs, and drums made in other industries.

# BLAST-FURNACE PRODUCTS

[A preliminary report for this industry was issued on Aug. 8, 1934]

**Description of the industry.**—This classification covers the manufacture, from ore and scrap, of pig iron, ferro-alloys—spiegeleisen, ferromanganese, ferrophosphorus, ferrosilicon, etc.—and castings made direct from the furnace. (The manufacture of electric ferro-alloys is included in the "Chemicals" industry.) In many cases blast furnaces are operated in conjunction with steel works, but for census purposes they are treated as separate establishments.

**Relation of "Blast-furnace products" and "Steel-works and rolling-mill products" industries.**—More than 80 percent of the total pig-iron output of blast furnaces in 1933 was used as a material by steel mills. A large part of the pig iron is delivered, mostly in a molten state, to steel works operated in conjunction with the blast furnaces, but in such cases the two units are treated, for census purposes, as separate establishments. A transfer value is assigned to the pig iron thus delivered, and this transfer value is included in the value of products for the blast furnaces and in the cost of materials for the steel works.

**Extent of coverage.**—All the establishments in this industry that reported at the census for 1931 were accounted for in the canvass for 1933.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931

The figures include data for 5 establishments in 1933 and 4 in 1931 which were engaged in the production of sintered ore and flue dust. The respective items for these groups of establishments are as follows: Salaried employees, 1933, 38; 1931, no data. Salaries, 1933, \$77,243; 1931, no data. Wage earners, 1933, 375; 1931, 217. Wages, 1933, \$240,439; 1931, \$326,610. Cost of materials, fuel, and purchased electric energy, 1933, \$428,888; 1931, \$723,735. Value of products, 1933, \$857,397; 1931, \$1,565,268. Value added by manufacture, 1933, \$428,509; 1931, \$841,533. No corresponding data are included for years prior to 1931]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>1</sup>	Wages	Cost of materials, furnace supplies, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>2</sup>
Thousands of dollars. (See sec. 25, p. 13)								
<i>United States</i>								
1933.....	72	1,087	12,098	2,210	11,564	183,957	213,685	29,729
1931.....	80	(3)	13,572	(3)	19,259	259,132	311,371	52,240
1929.....	105	2,416	24,960	6,946	41,959	610,294	771,425	161,132
1927.....	116	2,556	27,958	7,336	44,258	579,555	708,904	129,349
<i>States</i>								
Alabama:								
1933.....	5	106	964	165	706	7,923	10,047	2,125
1931.....	6	(3)	1,468	(3)	1,481	15,766	20,609	4,843
Indiana:								
1933.....	3	36	574	93	881	14,641	18,151	3,510
1931.....	3	(3)	875	(3)	1,454	23,568	30,886	7,318
New York:								
1933.....	8	103	829	201	831	8,247	10,416	2,169
1931.....	7	(3)	667	(2)	1,142	13,548	16,579	3,031
Ohio:								
1933.....	19	321	3,627	663	3,567	54,211	60,906	6,695
1931.....	19	(3)	3,273	(3)	4,754	59,986	70,178	10,192
Pennsylvania:								
1933.....	21	311	4,172	638	3,595	64,785	73,339	8,553
1931.....	22	(3)	4,145	(3)	5,668	86,764	99,534	12,769
Other States: <sup>4</sup>								
1933.....	16	210	1,932	451	1,985	34,150	40,827	6,677
1931.....	23	(2)	3,144	(3)	4,760	59,499	73,586	14,087

<sup>1</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.

<sup>2</sup> Value of products less cost of materials, furnace supplies, fuel, and purchased electric energy. See sec. 20, p. 11.

<sup>3</sup> No data.

<sup>4</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Colo., 1, 1; Ill., 4, 6; Ky., 1, 1; Md., 1, 1; Mass., 0, 1; Mich., 4, 6; Minn., 0, 1; Tenn., 2, 2; Utah, 1, 1; Va., 0, 1; W. Va., 2, 2. See sec. 26, p. 13.

TABLE 2.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929

	1933	1931	1929
Aggregate value.....	\$213, 685, 290	\$311, 371, 093	\$771, 426, 404
Pig iron (including ferro-alloys):			
Total tons (2,240 pounds).....	13, 256, 932	18, 288, 715	42, 486, 758
Total value.....	\$204, 056, 320	\$296, 212, 048	\$744, 588, 193
For consumption in other plants of same companies:			
Tons.....	10, 864, 258	14, 389, 802	32, 582, 807
Assigned value.....	\$162, 596, 245	\$231, 531, 137	\$543, 722, 095
For sale:			
Tons.....	2, 392, 674	3, 898, 913	9, 903, 951
Value.....	\$41, 460, 075	\$64, 680, 911	\$200, 866, 098
Blast-furnace gas used as fuel, coal equivalent, total tons (2,000 pounds).....	4, 483, 203	6, 175, 289	13, 927, 228
Consumed by blast furnaces, tons.....	2, 575, 391	3, 614, 703	8, 190, 550
Transferred to plants other than blast furnaces:			
Tons.....	1, 907, 812	2, 560, 586	5, 736, 678
Assigned value.....	\$6, 021, 257	\$5, 448, 917	\$19, 019, 252
Slag (granulated; slag for roofing, paving, etc.).....	\$507, 991	\$1, 288, 168	\$2, 462, 419
Sintered ore and flux dust, value, and receipts for tonnage sintered on custom basis (see headnote, table 1).....	\$754, 242	\$1, 565, 268	(1)
Other products, value, and receipts from sale of electric energy.....	\$2, 345, 480	\$3, 856, 692	\$5, 355, 600
Pig iron (including ferro-alloys made in blast furnaces), classified by smelting fuel:			
Coke:			
Total tons (2,240 pounds).....	13, 223, 991	18, 242, 472	42, 361, 895
For consumption in other plants of same companies.....	10, 864, 258	14, 389, 724	32, 582, 727
For sale <sup>2</sup> .....	2, 359, 733	3, 852, 748	9, 779, 168
Value.....	\$203, 475, 839	\$295, 217, 783	\$741, 632, 459
Charcoal:			
Tons (2,240 pounds).....	32, 941	46, 243	124, 863
Value.....	\$580, 481	\$964, 265	\$2, 955, 734
Pig iron (including ferro-alloys made in blast furnaces), classified by grade, tons (2,240 pounds):			
Basic, total.....	8, 003, 686	10, 149, 697	25, 065, 384
For consumption in other plants of same companies.....	7, 429, 949	9, 496, 216	22, 384, 938
For sale.....	573, 737	653, 481	2, 680, 446
Bessemer, total.....	3, 396, 855	4, 499, 218	9, 403, 782
For consumption.....	3, 239, 476	4, 373, 330	9, 131, 242
For sale.....	157, 379	125, 888	832, 540
Foundry, total.....	1, 037, 320	2, 129, 536	4, 358, 228
For consumption.....	39, 545	137, 246	395, 639
For sale.....	997, 775	1, 942, 290	3, 962, 589
Malleable, total.....	513, 166	947, 022	2, 349, 937
For consumption.....	113, 133	114, 172	274, 325
For sale.....	400, 033	832, 850	2, 075, 612
Low-phosphorus for consumption and for sale.....	57, 908	160, 620	370, 863
Forge or mill, white mottled, and miscellaneous, for consumption and for sale.....	4, 675	46, 643	191, 492
Ferro-alloys made in blast furnaces, for consumption and for sale <sup>3</sup> .....	234, 021	340, 871	648, 132
Direct castings, for consumption and for sale.....	9, 301	15, 108	38, 940
Pig iron (including ferro-alloys made in blast-furnace industry), classified by method of delivery or casting, tons (2,240 pounds):			
Delivered molten.....	9, 595, 087	12, 016, 954	29, 463, 804
Machine-cast.....	3, 454, 406	5, 953, 530	11, 832, 479
Sand-cast.....	56, 027	143, 106	1, 179, 181
Chill-cast.....	142, 111	160, 017	472, 364
Direct castings.....	9, 301	15, 108	38, 940

<sup>1</sup> No data.<sup>2</sup> Figures include data for a small tonnage produced by a combination of coke and coal.<sup>3</sup> For total production of ferro-alloys, by kind, made by blast furnaces and by electric furnaces, see table 3.

TABLE 3.—FERRO-ALLOYS—PRODUCTION IN BLAST FURNACES AND IN ELECTRIC FURNACES, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929

	NUMBER OF ESTABLISHMENTS			QUANTITY IN THOUSANDS OF TONS (2,240 LBS.) <sup>1</sup>			VALUE IN THOUSANDS OF DOLLARS <sup>1</sup>		
	1933	1931	1929	1933	1931	1929	1933	1931	1929
Total.....	29	27	31	357	476	869	24,384	31,899	70,261
Produced for sale.....	28	26	30	322	365	746	22,534	23,171	60,245
Produced for consumption in same or in other plants of producing company (assigned value).....	7	5	5	35	111	123	1,850	8,728	10,016
Made in blast furnaces.....	11	10	12	234	341	648	12,328	17,614	41,606
Made in electric furnaces.....	18	17	19	123	136	220	12,055	14,285	28,655
Ferromanganese and spiegeleisen.....	9	9	9	173	239	478	11,428	15,357	36,978
Ferrosilicon.....	12	12	12	147	198	328	5,688	8,092	15,713
Ferrochrome.....	7	8		19	27		4,400	5,905	
Ferrophosphorus.....	5			12	13	63	671		
Other ferro-alloys.....	9	12	16	5			2,198	2,546	17,570

<sup>1</sup> See sec. 25, p. 13.<sup>2</sup> The sums of the groups of items in these columns exceed the totals in some cases because of the fact that some establishments produce both for sale and for consumption, and produce more than 1 kind of ferro-alloys.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR SELECTED STATES, 1933 AND 1931

[For average for the year, see table 1. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 26, p. 13]

	NUMBER REPORTED FOR—											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<i>United States</i>												
1933.....	8,985	9,308	8,743	8,533	9,165	11,343	13,841	15,475	15,567	15,535	14,628	14,048
1931.....	15,812	15,978	15,741	15,500	15,386	13,950	13,069	12,235	11,801	11,689	11,312	10,397
<i>States</i>												
Alabama:												
1933.....	603	643	<i>528</i>	555	718	878	1,314	1,346	1,271	1,253	1,156	1,316
1931.....	1,638	1,664	1,720	1,611	1,556	1,508	1,455	1,375	1,329	1,294	1,282	1,185
Illinois:												
1933.....	661	655	620	<i>606</i>	645	801	934	952	873	885	794	701
1931.....	1,724	1,793	1,802	1,795	1,713	1,571	1,427	<i>1,245</i>	1,410	1,321	1,287	1,281
Indiana:												
1933.....	477	496	442	<i>371</i>	476	499	725	755	674	750	621	600
1931.....	1,075	1,014	991	1,029	1,047	896	879	775	735	735	682	<i>642</i>
Michigan:												
1933.....	207	182	<i>165</i>	174	223	252	307	352	382	401	530	538
1931.....	714	756	755	636	684	611	555	536	534	541	530	467
New York:												
1933.....	435	364	<i>319</i>	358	455	659	989	1,121	1,219	1,255	1,336	1,443
1931.....	694	712	697	<i>619</i>	709	628	670	682	656	660	653	624
Ohio:												
1933.....	2,898	3,012	<i>2,864</i>	2,926	2,960	3,239	3,770	4,364	4,643	4,617	4,256	3,973
1931.....	3,473	3,629	3,587	3,630	3,586	3,477	3,283	3,105	3,057	2,921	2,983	<i>2,642</i>
Pennsylvania:												
1933.....	3,008	3,136	3,044	<i>2,775</i>	2,902	4,202	4,805	5,560	5,553	5,432	5,014	4,636
1931.....	5,172	5,194	4,963	5,032	4,964	4,258	3,833	3,607	3,201	3,367	3,149	<i>3,006</i>



**BOLTS, NUTS, WASHERS, AND RIVETS; FORGINGS, IRON AND STEEL; NAILS, SPIKES, ETC.; SPRINGS, STEEL, EXCEPT WIRE; STRUCTURAL AND ORNAMENTAL METAL WORK; WROUGHT PIPE, WELDED AND HEAVY RIVETED**

[Preliminary reports for these industries were issued on Sept. 11, 1934, and subsequent dates]

**Description of the industries.**—The “Bolts, nuts, washers, and rivets, not made in plants operated in connection with rolling mills” industry embraces establishments engaged primarily in the manufacture of bolts, nuts, rivets, lock washers, plate washers, riveting burrs, turnbuckles, toggle bolts, etc. No detailed product statistics are given for this industry, but the total production of bolts, nuts, etc., in all industries is shown in table 4, p. 464.

The forgings covered by the classification “Forgings, iron and steel, not made in plants operated in connection with rolling mills” are those specifically reported as such and manufactured by establishments engaged primarily in the commercial production of forgings. The industry does not include the manufacture of forged products, such as tools, for which separate census classifications are provided, nor of forged parts made and installed by manufacturers of motor vehicles, railroad cars, machinery, etc. Iron and steel forgings are made to a large extent in other industries, in which they are not specifically classified as such.

The principal products of the establishments classified in the “Nails, spikes, etc., not made in wire mills or in plants operated in connection with rolling mills” industry are wire nails, brads, and spikes, cut nails and spikes, horseshoe nails, tacks, staples, etc. Wire nails, brads, and spikes are made chiefly in wire mills and in wire-drawing departments of rolling mills. Detailed statistics covering their production in all industries will be found in table 3, p. 485; and similar statistics for cut nails, spikes, tacks, and horseshoe nails are given in table 4, p. 464.

The establishments classified in the “Springs, steel, except wire, not made in plants operated in connection with rolling mills” industry are engaged wholly or principally in the manufacture of leaf springs—railway, motor-vehicle, carriage, wagon, etc.—and hot-wound railway springs. (Wire springs are products of the “Wirework not elsewhere classified” industry.) The statistics do not include data for the manufacture of steel springs produced and installed in automobiles and trucks by manufacturers of such vehicles, nor, with very few exceptions, the production of replacement springs by motor-vehicle manufacturers. No data for establishments engaged primarily in repairing and replacing motor-vehicle springs are included, the production of new springs by such establishments being negligible. The figures for 1931 have been revised, since their publication in the report for that year, by excluding data for such repairs and replacements, and by deducting the data for a manufacturer of motor vehicles who reported his production of leaf springs separately for 1931 and earlier years but not for 1933. These revised figures (in italics) are compa-

table with the respective items for 1933, and the 1931 figures as originally published (in roman type) are comparable with the respective items for 1929 and 1927. The total production of steel springs, including those made in plants operated in connection with rolling mills, is shown in footnote 13, table 1.

The "Structural and ornamental metal work, not made in plants operated in connection with rolling mills" industry embraces establishments engaged primarily in assembling and fabricating structural steel for buildings and bridges, ornamental iron and steel work, balconies, bank fixtures, coal chutes, elevator inclosures, expanded metal for plaster and concrete work, iron fences, fire escapes, fireproof moving-picture booths, gratings, portable steel buildings, etc. The figures for this industry cover *shop work only*.

The "Wrought pipe, welded and heavy riveted, not made in plants operated in connection with rolling mills" industry designation is applied to establishments engaged primarily in the manufacture of boiler tubes, oil-country casing, tubing, and pipe, other black and galvanized wrought pipe, electrical conduit, and heavy riveted pipe. The production of wrought pipe in rolling mills, however, greatly exceeds that in the wrought-pipe industry. (The production of seamless tubes from pierced billets is classified in the rolling-mill industry.) Detailed statistics covering the total production of wrought pipe in all industries in which such pipe is made are given in table 4, page 464.

**Extent of coverage.**—All the establishments in the "Nails, spikes, etc." industry that reported at the census for 1931 were accounted for in the canvass for 1933. The census coverage of the "Bolts, nuts, washers, and rivets," "Forgings, iron and steel," "Springs, steel, except wire," and "Wrought pipe, welded and heavy riveted" industries was nearly complete. Only a very few establishments in these four industries failed to supply any information in regard to their status (active, idle, etc.), or their activities in 1933, and these establishments accounted for less than 1 percent of the total number of wage earners and of the total value of products reported for the industries for 1931. Of the 1,302 establishments in the "Structural and ornamental metal work" industry reporting for 1931, 104 failed to supply any information for 1933, but the total number of wage earners and the total value of products accounted for by these establishments represented less than 2 percent of the respective totals reported for this industry for 1931.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES 1933 AND 1931

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage-earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
Thousands of dollars. (See sec. 25, p. 13)								
<b>BOLTS, NUTS, WASHERS, AND RIVETS, NOT MADE IN PLANTS OPERATED IN CONNECTION WITH ROLLING MILLS</b>								
<i>United States</i>								
1933.....	103	1,365	8,486	2,607	7,155	15,350	32,874	17,52
1931.....	116	( <sup>5</sup> )	10,518	( <sup>5</sup> )	10,177	16,872	39,483	22,61
1929.....	117	2,034	16,175	6,949	22,116	44,212	102,392	53,18
1927.....	115	1,931	13,614	5,636	17,324	38,302	75,876	37,57
<i>States<sup>4</sup></i>								
<b>California:</b>								
1933.....	4	17	67	27	78	226	398	17
1931.....	5	( <sup>5</sup> )	115	( <sup>5</sup> )	161	246	590	34
<b>Connecticut:</b>								
1933.....	5	26	208	49	202	417	808	39
1931.....	7	( <sup>5</sup> )	210	( <sup>5</sup> )	222	324	833	50
<b>Illinois:</b>								
1933.....	19	154	848	255	744	1,731	4,233	2,50
1931.....	20	( <sup>5</sup> )	1,048	( <sup>5</sup> )	1,094	2,129	5,379	3,26
<b>Indiana:</b>								
1933.....	5	62	409	138	333	871	1,724	86
1931.....	5	( <sup>5</sup> )	449	( <sup>5</sup> )	325	937	1,845	90
<b>Massachusetts:</b>								
1933.....	6	14	68	16	64	168	332	16
1931.....	9	( <sup>5</sup> )	1,098	( <sup>5</sup> )	1,035	659	2,602	1,94
<b>Michigan:</b>								
1933.....	7	39	279	68	258	723	1,346	62
1931.....	6	( <sup>5</sup> )	74	( <sup>5</sup> )	91	272	474	20
<b>New Jersey:</b>								
1933.....	4	82	158	110	142	337	832	49
1931.....	5	( <sup>5</sup> )	209	( <sup>5</sup> )	342	509	1,415	90
<b>Ohio:</b>								
1933.....	19	367	3,476	619	2,920	4,941	11,226	6,28
1931.....	20	( <sup>5</sup> )	3,875	( <sup>5</sup> )	3,757	5,650	12,719	7,07
<b>Pennsylvania:</b>								
1933.....	15	359	1,598	822	1,246	3,467	6,909	3,44
1931.....	16	( <sup>5</sup> )	2,194	( <sup>5</sup> )	1,876	3,951	8,650	4,09
<b>Rhode Island:</b>								
1933.....	5	56	442	104	368	465	1,179	71
1931.....	5	( <sup>5</sup> )	486	( <sup>5</sup> )	401	424	1,171	74
<b>Wisconsin:</b>								
1933.....	3	35	134	46	108	273	597	32
1931.....	3	( <sup>5</sup> )	107	( <sup>5</sup> )	97	205	537	38
<b>Other States:<sup>7</sup></b>								
1933.....	11	154	799	354	693	1,731	3,290	1,55
1931.....	15	( <sup>5</sup> )	653	( <sup>5</sup> )	774	1,567	3,218	1,65
<b>FORGINGS, IRON AND STEEL, NOT MADE IN PLANTS OPERATED IN CONNECTION WITH ROLLING MILLS</b>								
<i>United States</i>								
1933.....	<sup>8</sup> 181	1,184	7,953	2,301	7,354	16,896	32,523	15,62
1931.....	202	( <sup>5</sup> )	9,971	( <sup>5</sup> )	11,444	22,657	47,700	25,04
1929.....	218	2,630	20,882	8,716	34,505	71,607	156,249	84,64
1927.....	219	2,325	15,594	7,266	23,540	52,102	105,036	52,93
<b>NAILS, SPIKES, ETC., NOT MADE IN WIRE MILLS OR IN PLANTS OPERATED IN CONNECTION WITH ROLLING MILLS</b>								
<i>United States</i>								
1933.....	<sup>9</sup> 39	205	1,695	362	1,590	2,704	10,973	4,26
1931.....	46	( <sup>5</sup> )	1,570	( <sup>5</sup> )	1,670	2,982	6,828	3,84
1929.....	55	376	2,027	1,045	2,553	5,956	12,855	6,59
1927.....	56	358	2,100	989	2,670	5,157	11,753	6,59

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
<i>Thousands of dollars. (See sec. 25, p. 13)</i>								
<b>SPRINGS, STEEL, EXCEPT WIRE,<sup>11</sup> NOT MADE IN PLANTS OPERATED IN CONNECTION WITH ROLLING MILLS</b>								
<i>United States</i>								
1933.....	<sup>12</sup> 60	396	2, 112	609	1, 972	5, 543	<sup>13</sup> 10, 413	4, 869
1931 <sup>14</sup> .....	77	( <sup>5</sup> )	2, 561	( <sup>5</sup> )	3, 101	6, 397	<sup>13</sup> 12, 614	6, 248
1931.....	98	( <sup>5</sup> )	2, 938	( <sup>5</sup> )	3, 634	7, 541	15, 158	7, 617
1929.....	86	821	5, 842	2, 655	9, 314	25, 372	46, 672	21, 300
1927.....	94	938	5, 763	2, 904	8, 913	24, 599	43, 821	19, 222
<b>STRUCTURAL AND ORNAMENTAL METAL WORK, NOT MADE IN PLANTS OPERATED IN CONNECTION WITH ROLLING MILLS</b>								
<i>United States</i>								
1933.....	962	5, 170	21, 377	7, 660	18, 624	63, 169	107, 612	44, 443
1931.....	1, 302	( <sup>5</sup> )	37, 510	( <sup>5</sup> )	47, 875	131, 649	238, 033	106, 384
1929.....	1, 482	13, 658	54, 947	39, 082	87, 786	244, 696	477, 037	232, 341
1927.....	1, 284	12, 732	52, 392	35, 660	84, 578	243, 446	440, 376	196, 930
<i>States<sup>6</sup></i>								
<b>Alabama:</b>								
1933.....	12	114	413	152	239	1, 245	2, 008	763
1931.....	13	( <sup>5</sup> )	560	( <sup>5</sup> )	556	2, 675	4, 078	1, 403
<b>California:</b>								
1933.....	75	249	1, 288	327	1, 274	4, 310	6, 482	2, 172
1931.....	105	( <sup>5</sup> )	1, 882	( <sup>5</sup> )	2, 526	5, 078	9, 868	4, 791
<b>Colorado:</b>								
1933.....	10	37	96	63	87	479	772	293
1931.....	12	( <sup>5</sup> )	152	( <sup>5</sup> )	210	699	1, 226	527
<b>Connecticut:</b>								
1933.....	14	41	114	75	117	242	551	309
1931.....	18	( <sup>5</sup> )	196	( <sup>5</sup> )	279	529	1, 150	621
<b>District of Columbia:</b>								
1933.....	11	35	118	50	142	320	693	372
1931.....	11	( <sup>5</sup> )	136	( <sup>5</sup> )	185	334	861	526
<b>Florida:</b>								
1933.....	9	25	66	33	52	107	241	134
1931.....	12	( <sup>5</sup> )	100	( <sup>5</sup> )	117	174	503	330
<b>Georgia:</b>								
1933.....	5	11	45	11	37	150	229	79
1931.....	5	( <sup>5</sup> )	182	( <sup>5</sup> )	127	318	596	278
<b>Illinois:</b>								
1933.....	84	456	1, 785	664	1, 586	4, 638	10, 001	5, 363
1931.....	112	( <sup>5</sup> )	2, 934	( <sup>5</sup> )	3, 997	10, 370	19, 250	8, 879
<b>Indiana:</b>								
1933.....	21	187	869	298	688	2, 495	3, 953	1, 457
1931.....	27	( <sup>5</sup> )	1, 497	( <sup>5</sup> )	1, 937	5, 936	9, 886	3, 950
<b>Iowa:</b>								
1933.....	12	69	231	81	177	858	1, 272	413
1931.....	14	( <sup>5</sup> )	503	( <sup>5</sup> )	572	2, 005	3, 156	1, 151
<b>Kansas:</b>								
1933.....	7	78	227	112	185	1, 072	1, 692	620
1931.....	10	( <sup>5</sup> )	350	( <sup>5</sup> )	357	1, 663	2, 483	820
<b>Kentucky:</b>								
1933.....	7	67	213	95	219	458	1, 005	546
1931.....	10	( <sup>5</sup> )	351	( <sup>5</sup> )	445	775	1, 908	1, 133
<b>Louisiana:</b>								
1933.....	4	4	20	7	17	32	60	28
1931.....	8	( <sup>5</sup> )	75	( <sup>5</sup> )	60	225	369	144
<b>Maine:</b>								
1933.....	3	8	26	12	29	69	117	48
1931.....	3	( <sup>5</sup> )	42	( <sup>5</sup> )	60	113	200	87
<b>Maryland:</b>								
1933.....	10	133	426	214	395	1, 529	2, 469	940
1931.....	14	( <sup>5</sup> )	416	( <sup>5</sup> )	501	1, 734	3, 041	1, 307

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

	Number of establishments	Number of salaried employees <sup>1,2</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
<i>Thousands of dollars. (See sec. 25, p. 13)</i>								
STRUCTURAL AND ORNAMENTAL METAL WORK, NOT MADE IN PLANTS OPERATED IN CONNECTION WITH ROLLING MILLS—continued								
<i>States<sup>4</sup>—Continued</i>								
Massachusetts:								
1933.....	54	124	410	173	460	1,085	2,286	1,201
1931.....	69	( <sup>5</sup> )	939	( <sup>5</sup> )	1,356	3,303	6,534	3,231
Michigan:								
1933.....	32	145	732	230	810	2,603	4,134	1,531
1931.....	44	( <sup>5</sup> )	734	( <sup>5</sup> )	1,030	3,207	5,701	2,405
Minnesota:								
1933.....	15	99	549	148	477	701	1,791	1,090
1931.....	15	( <sup>5</sup> )	983	( <sup>5</sup> )	1,257	1,503	3,879	2,376
Missouri:								
1933.....	32	134	463	207	480	1,631	2,983	1,353
1931.....	41	( <sup>5</sup> )	833	( <sup>5</sup> )	1,111	2,194	5,062	2,807
Nebraska:								
1933.....	4	28	216	33	98	506	865	358
1931.....	5	( <sup>5</sup> )	286	( <sup>5</sup> )	359	713	1,490	777
New Jersey:								
1933.....	50	112	378	156	406	1,525	2,738	1,213
1931.....	73	( <sup>5</sup> )	1,641	( <sup>5</sup> )	1,887	5,256	10,269	5,013
New York:								
1933.....	175	559	2,027	918	2,074	4,450	9,374	4,924
1931.....	230	( <sup>5</sup> )	4,380	( <sup>5</sup> )	6,663	14,271	29,167	14,896
North Carolina:								
1933.....	9	36	103	45	61	338	604	266
1931.....	7	( <sup>5</sup> )	178	( <sup>5</sup> )	151	553	725	107
Ohio:								
1933.....	67	440	1,865	632	1,587	6,400	10,298	3,898
1931.....	90	( <sup>5</sup> )	4,712	( <sup>5</sup> )	6,289	15,929	29,549	13,620
Oklahoma:								
1933.....	10	92	318	139	225	1,703	2,661	958
1931.....	12	( <sup>5</sup> )	387	( <sup>5</sup> )	417	1,365	2,184	819
Oregon:								
1933.....	8	15	70	18	66	167	322	156
1931.....	9	( <sup>5</sup> )	109	( <sup>5</sup> )	157	253	588	334
Pennsylvania:								
1933.....	114	1,158	5,855	1,680	4,661	16,871	25,163	8,297
1931.....	148	( <sup>5</sup> )	8,791	( <sup>5</sup> )	10,498	36,950	59,830	22,880
Rhode Island:								
1933.....	4	20	49	34	53	130	278	148
1931.....	5	( <sup>5</sup> )	106	( <sup>5</sup> )	141	265	562	296
Tennessee:								
1933.....	11	49	258	75	156	593	980	387
1931.....	11	( <sup>5</sup> )	380	( <sup>5</sup> )	460	1,319	2,642	1,323
Texas:								
1933.....	29	192	642	267	487	2,091	3,753	1,063
1931.....	32	( <sup>5</sup> )	1,232	( <sup>5</sup> )	1,323	3,726	6,505	2,779
Utah:								
1933.....	4	10	23	11	19	79	179	99
1931.....	6	( <sup>5</sup> )	49	( <sup>5</sup> )	54	94	269	175
Virginia:								
1933.....	17	183	471	300	333	1,095	2,004	910
1931.....	15	( <sup>5</sup> )	684	( <sup>5</sup> )	668	2,151	3,738	1,586
Washington:								
1933.....	6	36	232	80	217	576	1,100	524
1931.....	16	( <sup>5</sup> )	389	( <sup>5</sup> )	471	965	1,811	846
West Virginia:								
1933.....	6	22	154	47	122	459	919	450
1931.....	6	( <sup>5</sup> )	219	( <sup>5</sup> )	241	1,194	1,645	462
Wisconsin:								
1933.....	20	167	541	237	510	1,923	3,161	1,238
1931.....	29	( <sup>5</sup> )	958	( <sup>5</sup> )	1,245	3,223	6,208	2,985
Other States: <sup>15</sup>								
1933.....	11	35	97	38	78	236	467	232
1931.....	15	( <sup>5</sup> )	144	( <sup>5</sup> )	168	581	1,101	520

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

	Number of establishments	Number of salaried employees <sup>1,2</sup>	Number of wage earners (average for the year)	Salaries <sup>3</sup>	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
<i>Thousands of dollars. (See sec. 25, p. 13)</i>								
WROUGHT PIPE, WELDED AND HEAVY RIVETED, NOT MADE IN PLANTS OPERATED IN CONNECTION WITH ROLLING MILLS								
<i>United States</i>								
1933-----	<sup>10</sup> 44	717	6,552	1,311	5,580	20,821	<sup>17</sup> 34,957	14,135
1931-----	51	( <sup>6</sup> )	8,045	( <sup>6</sup> )	9,890	42,291	75,041	32,749
1929-----	50	1,419	11,417	4,395	18,762	70,121	124,659	54,538
1927-----	44	1,111	11,083	3,514	16,066	55,779	98,186	42,407

<sup>1</sup> Not including proprietors and firm members, as follows: "Bolts, nuts, washers, and rivets," etc.—1933, 16; 1931, no data; 1929, 17; 1927, 27. "Forgings, iron and steel," etc.—1933, 28; 1931, no data; 1929, 43; 1927, 53. "Nails and spikes," etc.—1933, 3; 1931, no data; 1929, 10; 1927, 25. "Springs, steel, except wire," etc.—1933, 17; 1931, no data; 1929, 12; 1927, 20. "Structural and ornamental metal work," etc.—1933, 309; 1931, no data; 1929, 732; 1927, 778. "Wrought pipe, welded and heavy riveted," etc.—1933, 4; 1931, no data; 1929, 3; 1927, 6.

<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.

<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.

<sup>4</sup> For total production of bolts, nuts, washers, rivets, etc., by all plants (including those operated in connection with rolling mills), see table 4, p. 464.

<sup>5</sup> No data.

<sup>6</sup> See sec. 26, p. 13.

<sup>7</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Ala., 2, 2; Md., 2, 1; Minn., 1, 2; N. Y., 3, 7; Oreg., 1, 1; Wash., 2, 2.

<sup>8</sup> Ala., 2 establishments; Calif., 7; Colo., 2; Conn., 9; Ill., 21; Ind., 7; Iowa, 1; Ky., 2; Md., 2; Mass., 8; Mich., 19; Mo., 1; N. J., 8; N. Y., 16; Ohio, 31; Oreg., 1; Pa., 32; Tenn., 1; Va., 1; Wash., 3; Wis., 7.

<sup>9</sup> Conn., 3 establishments; Ill., 4; Ind., 4; Md., 2; Mass., 16; N. H., 1; N. J., 1; N. Y., 3; Ohio, 3; Pa., 2; W. Va., 1.

<sup>10</sup> For total production of wire nails and spikes, etc., by all plants (including wire mills and wire-drawing departments of rolling mills), see table 3, p. 485; for total production of cut and wrought nails, spikes, etc., see table 4, p. 11.

<sup>11</sup> For production of wire springs, see table 3, p. 485.

<sup>12</sup> Calif., 6 establishments; Conn., 2; Ga., 1; Ill., 3; Ind., 2; Mass., 3; Mich., 3; Minn., 2; Mo., 5; N. Y., 6; Ohio, 5; Okla., 1; Oreg., 1; Pa., 14; R. I., 1; Tex., 2; Wash., 3; Wis., 1.

<sup>13</sup> Includes values of products normally belonging to other industries: 1933, \$1,390,832; 1931, \$1,443,567. Does not include value of steel springs made as secondary products by establishments classified in other industries: 1933, \$5,376,788; 1931, \$6,914,893. The total production of steel springs for sale as such, regardless of the industry classification of the establishments by which manufactured, as reported for the last two census years, was as follows (see "Description of the industries," p. 432, fourth paragraph):

Class	Tons (2,000 pounds)		Value	
	1933	1931	1933	1931
Total-----			\$14,398,516	\$18,085,638
Leaf springs for railroad equipment, motor vehicles, carriages, wagons, etc.:				
Quantity reported-----	82,740	88,394	8,752,130	10,302,596
Quantity not reported-----			4,744,055	6,182,471
Hot-wound springs (railroad)-----	9,962	18,161	902,331	1,600,571

<sup>14</sup> Adjusted for comparison with 1933. (See "Description of the industries," p. 432, fourth paragraph).

<sup>15</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Ariz., 1, 2; Ark., 1, 1; Del., 2, 4; Miss., 1, 1; Mont., 1, 1; N. H., 1, 2; S. C., 2, 2; S. Dak., 1, 1; Vt., 1, 1.

<sup>16</sup> Ariz., 1 establishment; Calif., 13; Ill., 3; Ind., 1; Mich., 5; Mo., 2; Nev., 1; N. Y., 3; Ohio, 5; Pa., 9; Wis., 1.

<sup>17</sup> For total production of welded and heavy riveted wrought pipe by all plants (including those operated in connection with rolling mills), see table 4, p. 464.

TABLE 2.—WAGE EARNERS BY QUARTERS, FOR SELECTED STATES: 1933 AND 1931

[The average for the year (table 1) differs from the average of the quarterly figures below. (See fourth sentence, sec. 13, p. 8.) See sec. 26, p. 13]

	1933 <sup>1</sup>				1931			
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
<b>BOLTS, NUTS, WASHERS, AND RIVETS, NOT MADE IN PLANTS OPERATED IN CONNECTION WITH ROLLING MILLS</b>								
United States.....	6,404	8,109	10,426	9,688	11,564	10,791	9,637	9,293
<i>States</i>								
California.....	57	64	81	74	113	130	110	99
Connecticut.....	184	199	241	224	228	224	199	184
Illinois.....	605	825	1,085	991	1,256	1,156	917	796
Indiana.....	283	344	538	481	475	429	437	436
Massachusetts.....	62	66	75	71	1,134	1,075	1,007	1,074
Michigan.....	211	280	338	319	87	75	65	65
New Jersey.....	143	133	185	203	202	209	220	204
New York.....	226	301	485	432	384	358	340	293
Ohio.....	2,669	3,369	4,144	3,858	4,188	3,917	3,540	3,632
Pennsylvania.....	1,156	1,575	1,962	1,842	2,509	2,316	1,925	1,717
Rhode Island.....	371	423	517	480	546	501	437	416
Wisconsin.....	107	129	171	155	119	105	98	96
<b>STRUCTURAL AND ORNAMENTAL METAL WORK, NOT MADE IN PLANTS OPERATED IN CONNECTION WITH ROLLING MILLS</b>								
United States.....	18,322	20,955	24,554	22,950	40,338	38,513	36,293	31,367
<i>States</i>								
Alabama.....	305	327	558	520	625	582	488	476
California.....	860	1,068	1,498	1,911	2,183	1,738	1,693	1,492
Colorado.....	94	85	128	115	139	177	157	129
Connecticut.....	97	114	123	133	204	210	211	147
District of Columbia.....	118	118	123	110	141	143	139	118
Florida.....	49	70	69	71	112	89	96	99
Georgia.....	43	41	45	48	203	207	197	202
Illinois.....	1,420	1,733	2,164	1,850	3,362	3,039	2,715	2,326
Indiana.....	934	854	828	861	1,564	1,436	1,563	1,317
Iowa.....	175	215	257	258	537	538	501	407
Kansas.....	251	202	237	243	375	414	298	290
Kentucky.....	195	222	244	183	403	381	325	326
Louisiana.....	16	21	19	23	33	87	113	52
Maine.....	16	29	29	27	45	35	37	33
Maryland.....	371	428	470	475	547	371	334	307
Massachusetts.....	339	397	457	423	853	971	1,030	853
Michigan.....	445	863	815	1,080	731	792	712	652
Minnesota.....	486	526	625	586	1,015	993	1,067	870
Missouri.....	378	423	558	484	856	804	826	724
Nebraska.....	199	222	239	187	283	311	288	251
New Jersey.....	326	379	433	523	1,854	1,630	1,610	1,240
New York.....	1,900	2,009	2,167	1,997	5,007	4,446	4,298	3,666
North Carolina.....	85	101	111	109	187	202	174	134
Ohio.....	1,630	1,885	2,118	1,710	4,968	5,151	4,611	3,487
Oklahoma.....	278	319	347	342	427	377	354	318
Oregon.....	53	42	112	92	112	111	104	84
Pennsylvania.....	5,169	5,866	6,890	5,976	9,276	9,010	8,432	7,733
Rhode Island.....	38	52	56	56	114	103	105	107
Tennessee.....	266	258	257	197	379	407	364	352
Texas.....	590	570	824	723	1,307	1,233	1,266	989
Utah.....	16	23	29	24	52	51	45	36
Virginia.....	411	458	490	535	735	642	712	591
Washington.....	117	238	316	302	392	391	305	432
West Virginia.....	152	148	164	165	224	236	215	189
Wisconsin.....	425	555	646	544	969	962	957	799

<sup>1</sup> See secs. 5, p. 4, and 13, p. 8. The establishments canvassed with the standard schedule reported wage earners, by months, as follows:

*Bolts, nuts, washers, and rivets, not made in plants operated in connection with rolling mills.*—Number of establishments reported on standard schedule, 81.

January.....	6,355	May.....	6,869	September.....	10,206
February.....	6,510	June.....	7,935	October.....	9,902
March.....	6,242	July.....	9,482	November.....	9,869
April.....	6,429	August.....	10,236	December.....	9,469

*Structural and ornamental metal work, not made in plants operated in connection with rolling mills.*—Number of establishments reported on standard schedule, 67.

January.....	17,575	May.....	18,226	September.....	23,232
February.....	17,080	June.....	19,757	October.....	23,338
March.....	17,291	July.....	20,748	November.....	23,272
April.....	18,077	August.....	22,016	December.....	21,795

## CAST-IRON PIPE AND FITTINGS

[A preliminary report for this industry was issued on June 14, 1934]

**Description of the industry.**—This industry embraces establishments engaged primarily in the manufacture of cast-iron pipe and fittings for gas, water, sewage, etc. It has little relation to the manufacture of wrought-iron and steel pipe.

**Extent of coverage.**—All the establishments in this industry that reported at the census for 1931 were accounted for in the canvass for 1933.

**TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931**

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, foundry supplies, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
<i>Thousands of dollars. (See sec. 26, p. 13)</i>								
<i>United States</i>								
1933.....	71	687	9,454	1,139	5,847	8,992	20,916	11,924
1931.....	78	( <sup>4</sup> )	16,066	( <sup>4</sup> )	14,559	20,977	47,938	26,960
1929.....	72	1,286	19,741	3,751	22,552	34,289	80,261	45,971
1927.....	82	1,286	22,892	3,427	25,982	48,225	95,089	46,884
<i>States</i>								
<i>Alabama:</i>								
1933.....	24	289	3,808	477	2,144	3,264	7,913	4,649
1931.....	28	( <sup>4</sup> )	7,132	( <sup>4</sup> )	5,750	8,411	20,820	12,408
<i>California:</i>								
1933.....	4	8	106	11	75	62	204	142
1931.....	4	( <sup>4</sup> )	173	( <sup>4</sup> )	182	197	571	374
<i>Maryland:</i>								
1933.....	3	10	182	10	148	181	493	312
<i>New Jersey:</i>								
1933.....	7	153	1,935	244	1,412	2,156	4,800	2,644
1931.....	9	( <sup>4</sup> )	3,197	( <sup>4</sup> )	3,532	5,435	10,918	5,483
<i>New York:</i>								
1933.....	6	22	224	22	140	167	469	303
1931.....	6	( <sup>4</sup> )	293	( <sup>4</sup> )	314	344	915	571
<i>Pennsylvania:</i>								
1933.....	8	58	878	82	472	566	1,415	849
1931.....	9	( <sup>4</sup> )	1,076	( <sup>4</sup> )	1,054	1,332	3,136	1,805
<i>Tennessee:</i>								
1933.....	5	36	499	70	279	306	850	544
1931.....	5	( <sup>4</sup> )	975	( <sup>4</sup> )	818	1,071	2,541	1,470
<i>Other States:<sup>7</sup></i>								
1933.....	14	111	1,822	223	1,177	2,290	4,770	2,480
1931.....	17	( <sup>4</sup> )	3,220	( <sup>4</sup> )	2,909	4,187	9,036	4,849

<sup>1</sup> Not including proprietors and firm members, as follows: 1933, 7; 1931, no data; 1929, 9; 1927, 5.

<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.

<sup>3</sup> Value of products less cost of materials, foundry supplies, fuel, and purchased electric energy. See sec. 20, p. 11.

<sup>4</sup> No data.

<sup>5</sup> Does not include cost of foundry supplies, which is included for other years.

<sup>6</sup> Figures for 1931 withheld to avoid disclosing approximations of data for individual establishments; included in items for "Other States."

<sup>7</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Colo., 1, 1; Ga., 1, 1; Ill., 1, 0; Md. (1931), 3; Mass., 1, 1; N. C., 1, 1; Ohio, 4, 5; R. I., 1, 1; Utah, 1, 1; Va., 3, 3.



TABLE 2.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929

	QUANTITY (TONS 2,000 POUNDS)			VALUE IN THOUSANDS OF DOLLARS <sup>1</sup>		
	1933	1931	1929	1933	1931	1929
1. "Cast-iron pipe and fittings" industry, all products, total value.....				20,916	47,938	80,261
2. Cast-iron pipe and fittings.....				18,640	44,836	74,615
3. Other products, including castings (not normally belonging to the industry).....				2,276	3,101	5,645
4. Cast-iron pipe and fittings made as secondary products in other industries.....				3,993	6,274	11,275
Cast-iron pipe and fittings, aggregate (2 and 4).....				22,633	51,111	85,890
Quantity reported <sup>1</sup> .....	519,616	1,191,082	1,736,207	20,065	45,238	78,290
Quantity not reported.....				2,569	5,873	7,594
Bell and spigot pipe.....	341,269	867,887	1,222,695	10,852	27,570	44,707
Flanged pipe.....	6,989	9,733	22,473	381	601	1,184
Culvert pipe.....	4,630	18,090	21,391	143	783	1,109
Soil and plumbers' pipe.....	100,536	236,998	357,626	{ 3,319 }		18,763
Soil and plumbers' pipe fittings, separately reported.....	28,309			{ 1,490 }		
Gas and water pipe fittings, separately reported:						
Quantity reported.....	20,923	37,448	112,022	{ 2,123 }		3,398
Quantity not reported.....				{ 748 }		
Other cast-iron fittings and cast-iron fittings not reported as to kind:						
Quantity reported.....	16,960	20,926		{ 1,758 }		12,534
Quantity not reported.....				{ 2,569 }		
				{ 5,124 }		7,594

<sup>1</sup> See sec. 25, p. 13.<sup>2</sup> Figures include data for following amounts reported as cast by the centrifugal process: 1933, 180,745 tons; 1931, 340,118 tons; 1929, 334,670 tons.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR SELECTED STATES: 1933 AND 1931

[For average for the year, see table 1. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 26, p. 13]

	NUMBER REPORTED FOR—											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<i>United States</i>												
1933.....	8,226	7,573	<i>7,561</i>	8,242	8,665	9,478	10,132	10,549	10,652	10,759	10,683	10,930
1931.....	16,489	16,657	17,353	17,153	17,304	16,530	16,150	15,659	15,197	15,164	14,791	<i>14,341</i>
<i>States</i>												
Alabama:												
1933.....	3,372	3,258	<i>2,757</i>	3,191	3,458	3,976	4,255	4,386	4,406	4,273	4,161	4,224
1931.....	7,233	7,430	7,747	7,616	7,786	7,401	7,129	6,815	6,634	6,834	6,510	<i>6,464</i>
California:												
1933.....	82	79	<i>70</i>	86	100	101	107	116	126	139	140	127
1931.....	184	187	187	185	185	190	175	159	159	151	156	167
Maryland:												
1933.....	<i>131</i>	167	192	171	131	205	181	207	142	236	242	175
1931.....	334	336	335	<i>275</i>	<i>275</i>	<i>275</i>	330	335	335	335	337	333
New Jersey:												
1933.....	1,818	<i>1,436</i>	1,778	1,860	1,880	2,007	2,011	2,072	2,126	1,950	2,114	2,171
1931.....	3,073	3,018	3,410	3,448	3,402	3,372	3,289	3,177	3,090	3,067	3,047	<i>2,968</i>
New York:												
1933.....	<i>189</i>	133	171	176	190	201	242	267	269	<i>327</i>	287	292
1931.....	298	367	344	285	282	280	285	284	283	277	282	<i>245</i>
Ohio:												
1933.....	267	<i>80</i>	158	305	354	269	360	512	473	<i>772</i>	636	642
1931.....	1,450	1,492	1,492	1,466	1,454	1,382	1,333	1,324	1,156	1,131	977	<i>956</i>
Pennsylvania:												
1933.....	735	813	796	815	875	942	958	809	962	1,012	976	841
1931.....	1,360	1,086	1,104	1,116	1,123	1,058	1,064	1,050	1,014	996	977	<i>968</i>
Tennessee:												
1933.....	478	480	491	501	490	524	532	526	479	<i>455</i>	473	557
1931.....	989	1,062	1,058	1,017	1,016	988	981	954	982	900	923	<i>856</i>

**CUTLERY (NOT INCLUDING SILVER AND PLATED CUTLERY)  
AND EDGE TOOLS; FILES; HARDWARE NOT ELSEWHERE  
CLASSIFIED; SAWS; SCREW-MACHINE PRODUCTS AND  
WOOD SCREWS; TOOLS, NOT INCLUDING EDGE TOOLS,  
MACHINE TOOLS, FILES, OR SAWS.**

[Preliminary reports for these industries were issued on Sept. 6, 1934, and subsequent dates]

**Description of the industries.**—The principal products of the "Cutlery (not including silver and plated cutlery) and edge tools" industry are various kinds of cutting implements, which are divided, for census purposes, into two groups, namely, "Cutlery (not including silver and plated cutlery)" and "Edge tools." The cutting edge is used in so many forms that it is impracticable to collect data in detail except for the major classes. The most important of these are razors and razor blades, table and kitchen cutlery, pocket knives, scissors and shears, axes, adzes, hatchets, chisels, augers and bits, and cutting dies.

The establishments in the "Files" industry are engaged primarily in manufacturing files and rasps and in recutting files. Their products comprise not only files and rasps for the use of machinists, blacksmiths, cabinetmakers, etc., but also small files for jewelers, dentists, and manicurists.

The "Hardware not elsewhere classified" industry title refers to a large and rather loosely defined group of metal commodities which do not belong specifically to any of the other industry classifications. The term "hardware" is of so broad and general application that its use in the schedule necessarily entails misunderstanding and differences in interpretation. Obviously it would be impracticable, in drafting the schedule, either to explain in detail just what commodities the word should be understood to cover, or to list all such commodities. Furthermore, it has been found that manufacturers of a general line of metal goods of whatever description do not, in many cases, keep their records in such form as to enable them to supply separate data on their output of classes of hardware which belong to different census classifications. Moreover, it should be borne in mind that many commodities retailed and generally regarded as hardware are not covered by this industry title. Among the more important of such items are nails and spikes, wire and wire products, small machines such as grinders and lawn mowers, plumbers' supplies, tools and cutlery, screws and bolts, sporting and athletic goods, tinware, and stoves.

Considerable quantities of hardware normally belonging to this industry are made as secondary products by establishments in more or less related industries. In some cases, however, such products are not specifically reported as hardware but are merely listed as "Other products." The value of "Hardware not elsewhere classified" made as secondary products in other industries, as given in table 4, does not, therefore, cover the total production of hardware in other industries.

The establishments in the "Saws" industry are engaged primarily in the manufacture of saws and saw blades of all types, for cutting wood, metal, and other substances, such as carpenters' and butchers' saws, pruning saws, and bucksaws, and blades for hand and power hack saws, band saws, and circular saws. The industry does not include the manufacture of saw frames, saw tables, and sawing machines.

The "Screw-machine products and wood screws" industry embraces (1) establishments engaged primarily in the manufacture of machine screws and other screw-machine products (a great variety of special parts, many of which are threaded) and (2) those whose principal products are screws for use in wood.

The principal products of the "Tools, not including edge tools, machine tools, files, or saws" industry are hand tools (not including power-driven hand tools) other than edge tools, files, and saws. The group covers so large a variety of tools that it is impossible to collect separate data for each type or kind, many of the manufacturers being unable to supply such data. Some of the principal types included are hammers, wrenches, pliers, and rules; shovels, forks, rakes, and hoes; picks and mattocks; and a variety of special tools used by jewelers, plumbers, stonecutters, ironworkers, etc. A special schedule which provided for separate data on the more important types of tools was used in canvassing the industry, but because of the inability of many of the manufacturers to supply such data, it is impossible to compile detailed products statistics.

**Extent of coverage.**—All the establishments in the "Files" and "Saws" industries that reported at the census for 1931 were accounted for in the canvass for 1933. The 1933 coverage of the establishments reporting in the other four industries at the census for 1931 was nearly complete. Although 16 establishments in the "Tools, not including edge tools, machine tools, files, or saws" industry failed to supply any information in regard to their status (active, idle, etc.) or their activities in 1933, these establishments accounted for only a little more than one-half of 1 percent of the total number of wage earners and of the total value of products reported for this industry at the census for 1931; and although 5 establishments in the "Cutlery (not including silver and plated cutlery) and edge tools" industry, 4 in the "Screw-machine products and wood screws" industry, and 17 in the "Hardware not elsewhere classified" industry supplied no information in regard to their status or activities in 1933, these establishments accounted for less than one-half of 1 percent of the employment and of the production reported for the respective industries at the 1931 census.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931

	Number of establishments	Number of salaried employees 1 2	Number of wage earners (average for the year)	Salaries 2	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture 3
<i>Thousands of dollars. (See sec. 25, p. 13)</i>								
<b>CUTLERY (NOT INCLUDING SILVER AND PLATED CUTLERY) AND EDGE TOOLS.</b>								
<i>United States</i>								
1933.....	200	1,181	10,807	2,230	8,848	8,647	38,718	30,071
1931.....	221	(4)	12,485	(4)	12,194	8,983	52,337	43,354
1929.....	239	1,903	14,991	5,415	17,651	14,789	78,661	63,872
1927.....	230	1,911	15,832	4,710	18,892	18,180	76,688	58,508
<i>States 5</i>								
<b>Connecticut:</b>								
1933.....	21	200	2,173	326	1,650	1,873	5,527	3,648
1931.....	25	(4)	2,617	(4)	2,149	1,501	5,805	4,304
<b>Illinois:</b>								
1933.....	16	53	247	80	238	197	868	671
1931.....	17	(4)	324	(4)	401	308	1,249	941
<b>Massachusetts:</b>								
1933.....	39	285	1,529	672	1,366	1,187	12,131	10,944
1931.....	41	(4)	2,131	(4)	2,245	1,530	15,271	13,741
<b>Michigan:</b>								
1933.....	4	15	76	22	58	34	174	140
1931.....	4	(4)	79	(4)	88	37	210	173
<b>Missouri:</b>								
1933.....	11	64	713	102	825	410	2,117	1,707
1931.....	12	(4)	576	(4)	754	362	1,869	1,507
<b>New Jersey:</b>								
1933.....	24	120	950	249	794	839	3,476	2,636
1931.....	22	(4)	1,313	(4)	1,400	1,144	10,378	9,234
<b>New York:</b>								
1933.....	37	241	2,353	495	1,854	2,353	8,201	5,848
1931.....	38	(4)	2,771	(4)	2,932	2,373	11,588	9,214
<b>Ohio:</b>								
1933.....	12	61	735	106	498	356	1,424	1,067
1931.....	12	(4)	731	(4)	582	407	1,674	1,267
<b>Pennsylvania:</b>								
1933.....	12	47	318	61	304	360	936	576
1931.....	16	(4)	380	(4)	396	308	990	683
<b>Wisconsin:</b>								
1933.....	7	25	190	23	162	159	581	421
<b>Other States: 7</b>								
1933.....	17	70	1,523	94	1,099	871	3,285	2,413
1931.....	34	(4)	1,563	(4)	1,246	1,012	3,303	2,291
<b>FILES</b>								
<i>United States</i>								
1933.....	23	204	2,634	465	2,431	1,567	7,391	5,824
1931.....	26	(4)	3,016	(4)	2,719	1,221	7,316	6,095
1929.....	33	319	3,974	982	5,240	3,053	14,114	11,062
1927.....	36	300	3,948	849	5,145	3,136	12,974	9,838
<b>HARDWARE NOT ELSEWHERE CLASSIFIED</b>								
<i>United States</i>								
1933.....	381	4,017	32,550	6,523	26,937	30,040	85,077	55,037
1931.....	451	(4)	36,118	(4)	37,269	38,318	115,900	77,582
1929.....	485	7,820	52,306	19,769	67,702	76,480	229,478	152,997
1927.....	485	7,028	47,834	17,314	60,827	71,877	208,254	136,377
<i>States 8</i>								
<b>California:</b>								
1933.....	16	58	183	96	167	195	681	485
1931.....	27	(4)	286	(4)	391	401	1,107	706
<b>Connecticut:</b>								
1933.....	44	1,615	11,132	2,505	8,657	7,522	23,117	15,595
1931.....	53	(4)	12,937	(4)	12,606	10,419	33,036	22,616
<b>Illinois:</b>								
1933.....	66	458	3,481	744	2,838	4,393	11,280	6,887
1931.....	77	(4)	3,788	(4)	4,120	5,544	16,082	10,538
<b>Indiana:</b>								
1933.....	13	77	407	111	278	401	1,229	827
1931.....	16	(4)	432	(4)	390	454	1,602	1,148
<b>Iowa:</b>								
1933.....	5	26	206	36	121	214	491	277
1931.....	5	(4)	288	(4)	207	278	733	455

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

	Number of establishments	Number of salaried employees <sup>1, 2</sup>	Number of wage earners (average for the year)	Salaries <sup>3</sup>	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>4</sup>
Thousands of dollars. (See sec. 25, p. 13)								
HARDWARE NOT ELSEWHERE CLASSIFIED—continued								
States <sup>5</sup> —Continued								
Kentucky:								
1933.....	4	19	143	27	115	160	422	262
1931.....	4	( <sup>6</sup> )	174	( <sup>6</sup> )	184	286	691	406
Massachusetts:								
1933.....	26	112	703	146	558	936	2,382	1,446
1931.....	30	( <sup>6</sup> )	780	( <sup>6</sup> )	585	994	2,838	1,846
Michigan:								
1933.....	29	549	8,314	1,092	8,015	8,230	24,696	16,465
1931.....	32	( <sup>6</sup> )	7,311	( <sup>6</sup> )	8,591	8,486	27,603	19,177
Minnesota:								
1933.....	3	5	35	5	22	43	107	64
New Jersey:								
1933.....	16	86	393	143	336	625	1,481	858
1931.....	19	( <sup>6</sup> )	503	( <sup>6</sup> )	574	858	2,275	1,417
New York:								
1933.....	53	258	1,695	413	1,517	2,212	5,574	3,361
1931.....	61	( <sup>6</sup> )	2,102	( <sup>6</sup> )	2,465	3,003	8,395	5,382
Ohio:								
1933.....	31	222	1,776	369	1,392	1,720	4,450	2,780
1931.....	33	( <sup>6</sup> )	2,449	( <sup>6</sup> )	2,383	2,900	7,633	4,793
Pennsylvania:								
1933.....	35	268	2,609	408	1,751	1,720	4,848	3,128
1931.....	44	( <sup>6</sup> )	3,162	( <sup>6</sup> )	2,971	2,637	7,607	4,970
Rhode Island:								
1933.....	6	17	80	42	70	164	329	164
1931.....	6	( <sup>6</sup> )	79	( <sup>6</sup> )	78	150	375	225
Wisconsin:								
1933.....	16	137	777	263	603	870	2,443	1,573
1931.....	18	( <sup>6</sup> )	998	( <sup>6</sup> )	772	837	3,344	2,507
Other States: <sup>9</sup>								
1933.....	18	80	617	123	498	635	1,550	915
1931.....	27	( <sup>6</sup> )	829	( <sup>6</sup> )	652	1,072	2,531	1,459
SAWS								
United States								
1933.....	71	601	2,528	866	2,347	3,003	9,926	6,923
1931.....	78	( <sup>6</sup> )	3,005	( <sup>6</sup> )	3,084	4,035	11,572	7,537
1929.....	81	940	4,137	2,274	5,727	6,884	22,615	15,781
1927.....	77	952	4,182	2,119	5,754	7,674	22,628	14,964
States <sup>5</sup>								
Massachusetts:								
1933.....	8	59	386	91	348	457	1,624	1,167
1931.....	9	( <sup>6</sup> )	462	( <sup>6</sup> )	478	513	1,817	1,304
Michigan:								
1933.....	7	13	50	19	46	109	329	220
1931.....	7	( <sup>6</sup> )	66	( <sup>6</sup> )	84	116	347	232
New York:								
1933.....	10	40	168	66	167	222	772	550
1931.....	11	( <sup>6</sup> )	229	( <sup>6</sup> )	241	267	1,259	991
Other States: <sup>10</sup>								
1933.....	46	489	1,924	690	1,786	2,215	7,201	4,989
1931.....	51	( <sup>6</sup> )	2,248	( <sup>6</sup> )	2,281	3,139	8,149	5,011
SCREW-MACHINE PRODUCTS AND WOOD SCREWS <sup>11</sup>								
United States								
1933.....	255	1,537	10,236	2,553	8,951	13,485	33,449	19,904
1931.....	275	( <sup>6</sup> )	12,047	( <sup>6</sup> )	13,478	16,142	43,698	27,556
1929.....	273	2,467	19,881	8,065	28,987	39,493	105,975	66,512
1927.....	218	1,803	13,690	4,825	18,055	25,910	60,020	34,110
States <sup>5</sup>								
California:								
1933.....	11	10	68	15	74	107	271	164
1931.....	11	( <sup>6</sup> )	64	( <sup>6</sup> )	73	106	268	162
Connecticut:								
1933.....	30	244	2,096	452	1,582	2,060	5,279	3,219
1931.....	31	( <sup>6</sup> )	2,381	( <sup>6</sup> )	2,042	3,054	6,429	3,374

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

	Number of estab- lish- ments	Number of salaried em- ploy- ees 1 2	Num- ber of wage earners (average for the year)	Sala- ries 2	Wages	Cost of materials, contain- ers, fuel, and pur- chased electric energy	Value of prod- ucts	Value added by manu- facture 3
<i>Thousands of dollars. (See sec. 25, p. 13)</i>								
SCREW-MACHINE PRODUCTS AND WOOD SCREWS—continued								
<i>States 4—Continued</i>								
Illinois:								
1933.....	33	246	1,203	425	1,177	1,792	5,117	3,325
1931.....	41	(4)	1,539	(4)	1,888	2,358	7,420	5,062
Indiana:								
1933.....	10	38	300	61	208	251	668	417
1931.....	10	(4)	186	(4)	223	281	705	424
Massachusetts:								
1933.....	21	186	1,053	210	1,032	1,427	3,372	1,945
1931.....	23	(4)	1,076	(4)	1,335	1,175	3,896	2,722
Michigan:								
1933.....	39	159	1,139	274	1,118	2,084	4,827	2,743
1931.....	44	(4)	1,980	(4)	2,916	3,373	9,110	5,737
Missouri:								
1933.....	5	13	51	19	43	48	147	99
1931.....	4	(4)	48	(4)	62	39	206	167
New Jersey:								
1933.....	4	21	114	43	139	132	398	265
New York:								
1933.....	21	64	358	103	356	631	1,711	1,079
1931.....	23	(4)	370	(4)	473	650	2,070	1,420
Ohio:								
1933.....	42	365	2,545	647	2,225	3,883	8,484	4,601
1931.....	41	(4)	2,753	(4)	2,797	3,615	9,069	5,454
Pennsylvania:								
1933.....	20	89	510	135	463	562	1,664	1,102
1931.....	21	(4)	522	(4)	530	440	1,588	1,098
Wisconsin:								
1933.....	5	12	88	21	68	81	221	140
1931.....	6	(4)	65	(4)	77	105	254	149
Other States: 12								
1933.....	14	90	711	146	467	426	1,291	865
1931.....	20	(4)	1,063	(4)	1,062	947	2,734	1,787
TOOLS, NOT INCLUDING EDGE TOOLS, MACHINE TOOLS, FILES, OR SAWS								
<i>United States</i>								
1933.....	294	1,706	9,598	2,516	8,158	10,521	34,199	23,678
1931.....	355	(4)	10,833	(4)	11,209	13,725	42,417	28,692
1929.....	534	3,518	19,305	9,744	25,808	32,111	99,462	67,352
1927.....	405	2,830	16,447	6,843	20,941	28,058	76,607	48,549
<i>States 5</i>								
California:								
1933.....	14	37	87	50	68	68	320	257
1931.....	16	(4)	102	(4)	152	106	616	511
Connecticut:								
1933.....	21	301	1,392	394	1,108	985	3,371	2,387
1931.....	24	(4)	1,771	(4)	1,643	1,803	4,265	2,461
Illinois:								
1933.....	39	160	977	245	907	1,617	4,291	2,674
1931.....	47	(4)	1,010	(4)	1,226	1,608	5,158	3,550
Indiana:								
1933.....	8	23	198	38	149	236	606	370
1931.....	12	(4)	817	(4)	340	543	1,178	636
Iowa:								
1933.....	7	21	111	33	65	138	457	318
1931.....	8	(4)	135	(4)	141	220	675	454
Massachusetts:								
1933.....	36	188	1,011	287	863	1,007	3,536	2,529
1931.....	38	(4)	1,066	(4)	1,024	1,259	4,642	3,382
Michigan:								
1933.....	10	89	401	158	261	255	1,189	934
1931.....	13	(4)	696	(4)	645	809	2,551	1,742
Minnesota:								
1933.....	7	38	200	44	167	226	858	632
1931.....	9	(4)	196	(4)	167	275	956	681

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
Thousands of dollars. (See sec. 25, p. 13)								
TOOLS, NOT INCLUDING EDGE TOOLS, MACHINE TOOLS, FILES, OR SAWS—continued								
States <sup>4</sup> —Continued								
Missouri:								
1933.....	9	29	109	43	80	128	447	319
1931.....	9	( <sup>4</sup> )	145	( <sup>4</sup> )	144	371	1,188	817
New Jersey:								
1933.....	14	63	322	85	317	323	1,128	805
1931.....	16	( <sup>4</sup> )	557	( <sup>4</sup> )	688	393	1,714	1,321
New York:								
1933.....	45	223	1,396	344	1,288	1,572	4,650	3,077
1931.....	53	( <sup>4</sup> )	1,584	( <sup>4</sup> )	1,800	1,540	5,823	4,233
Ohio:								
1933.....	23	180	1,207	281	1,117	1,888	5,583	3,696
1931.....	24	( <sup>4</sup> )	1,197	( <sup>4</sup> )	1,319	2,071	5,669	3,699
Pennsylvania:								
1933.....	27	164	952	252	712	808	2,578	1,771
1931.....	36	( <sup>4</sup> )	1,084	( <sup>4</sup> )	972	1,276	3,521	2,245
Rhode Island:								
1933.....	3	2	12	( <sup>13</sup> )	14	7	36	30
1931.....	11	( <sup>4</sup> )	46	( <sup>4</sup> )	55	19	113	94
Vermont:								
1933.....	5	20	156	34	111	156	590	434
1931.....	4	( <sup>4</sup> )	160	( <sup>4</sup> )	166	270	910	639
Washington:								
1933.....	3	7	10	9	7	9	30	20
1931.....	5	( <sup>4</sup> )	15	( <sup>4</sup> )	18	15	53	38
Wisconsin:								
1933.....	6	73	242	93	239	359	1,248	889
1931.....	7	( <sup>4</sup> )	253	( <sup>4</sup> )	313	397	1,608	1,211
Other States: <sup>14</sup>								
1933.....	17	88	814	125	686	742	3,279	2,537
1931.....	23	( <sup>4</sup> )	499	( <sup>4</sup> )	437	749	1,778	1,029

<sup>1</sup> Not including proprietors and firm members, as follows: Cutlery—1933, 81; 1931, no data; 1929, 111 1927, 115. Files—1933, 6; 1931, no data; 1929, 6; 1927, 11. Hardware—1933, 98; 1931, no data; 1929, 124 1927, 188. Saws—1933, 24; 1931, no data; 1929, 40; 1927, 45. Screw-machine products and wood screws—1933, 92; 1931, no data; 1929, 106; 1927, 82. Tools—1933, 105; 1931, no data; 1929, 279; 1927, 227.

<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.

<sup>3</sup> Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.

<sup>4</sup> No data.

<sup>5</sup> See sec. 26, p. 13.

<sup>6</sup> Figures for 1931 withheld to avoid disclosing approximations of data for individual establishments; included in items for "Other States."

<sup>7</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Ark., 1, 1; Calif., 2, 6; Colo., 1, 1; Ind., 1, 2; Ky., 1, 1; Maine, 2, 2; Md., 0, 2; Minn., 1, 1; N. H., 3, 3; R. I., 2, 3; Tenn., 1, 1; Vt., 1, 1; Wash., 0, 2; W. Va., 1, 1; Wis. (1931), 7.

<sup>8</sup> Conn., 1 establishment; Ill., 2; Ind., 1; Iowa, 1; Mass., 1; Mich., 1; N. J., 4; N. Y., 2; Ohio, 5; Pa., 4; R. I., 1.

<sup>9</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Kans., 1, 1; Maine, 2, 2; Md., 2, 2; Minn. (1931), 4; Mo., 5, 5; Nebr., 1, 1; N. H., 1, 2; Tenn., 1, 2; Tex., 0, 1; Vt., 0, 1; Va., 2, 2; Wash., 3, 3; W. Va., 0, 1.

<sup>10</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Ala., 2, 2; Calif., 2, 3; Conn., 4, 4; Ga., 1, 1; Ill., 9, 8; Ind., 3, 3; La. (1931), 1; Maine, 1, 1; Md., 1, 1; Miss., 1, 1; Mo. (1931), 1; N. H., 1, 1; N. J., 2, 2; N. C., 1, 1; Ohio, 5, 5; Oreg., 1, 2; Pa., 8, 9; R. I., 2, 2; S. C. (1931), 1; Tenn. (1931), 1; Wash., 2, 1.

<sup>11</sup> Cost of contract work reported by establishments in the "Screw-machine products and wood screws" industry for 1933 amounted to \$345,057. The amounts paid for contract work in the other industries covered by this table were negligible.

<sup>12</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Md., 2, 2; Minn., 2, 2; N. H., 1, 1; N. J. (1931), 5; R. I., 8, 9; Wash., 1, 1.

<sup>13</sup> Withheld to avoid disclosing compensation of individual employees; included in figure for "Other States."

<sup>14</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Colo., 1, 0; Del., 2, 2; Fla., 1, 0; Maine, 1, 2; Md., 2, 3; Miss., 1, 1; N. H., 0, 3; N. C., 1, 1; Oreg., 1, 1; S. Dak., 1, 1; Tenn., 2, 2; Tex., 1, 4; W. Va., 3, 3.

TABLE 2.—CUTLERY AND EDGE TOOLS—PRODUCTION, BY KIND, NUMBER, AND VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929

	1933	1931	1929
1. "Cutlery (not including silver and plated cutlery) and edge tools" industry, all products, total value.....	\$38,717,841	\$52,336,936	\$78,660,872
2. Cutlery and edge tools.....	\$37,209,238	\$50,598,354	\$75,522,532
3. Other products (not normally belonging to the industry).....	\$1,388,984	\$1,444,603	\$2,917,971
4. Receipts for repair work.....	\$119,619	\$293,979	\$220,369
5. Cutlery and edge tools made as secondary products in other industries, value.....	\$1,626,668	\$1,931,502	\$5,789,948
Cutlery and edge tools, aggregate value (2 and 5).....	\$38,835,906	\$52,529,856	\$81,312,480
Cutlery:			
Table cutlery (not including silver and plated) and kitchen cutlery, value.....	\$3,493,479	\$3,855,193	\$7,776,263
Agricultural cutlery (grass hooks, corn knives, bush hooks, hay knives, and similar tools), value.....	\$998,219	\$871,948	(1)
Scissors, shears, and snips, value.....	\$2,322,875	\$3,433,827	\$4,662,730
Clippers (barbers' or toilet, and animal), value.....	\$551,233	\$314,218	(1)
Razors and razor blades, total value.....	\$17,474,360	\$29,889,304	\$42,195,099
Safety razors:			
Number reported:			
Number.....	3,759,784	13,537,002	(1)
Value.....	\$540,761	\$1,868,756	\$1,823,657
Number not reported, value.....	\$63,541		
Safety-razor blades:			
Number.....	742,210,265	707,989,215	(1)
Value.....	\$16,785,058	\$27,906,266	\$39,967,357
Other razors:			
Number.....	144,161	170,211	(1)
Value.....	\$85,000	\$114,282	\$404,085
Pocket knives, value.....	\$2,153,803	\$3,732,603	\$5,333,133
Butcher knives and cleavers, value.....	\$828,680	\$805,929	(1)
Other cutlery and cutlery not reported by kind, value.....	\$1,530,264	\$1,240,000	\$5,030,910
Edge tools:			
Axes, adzes, and hatchets, value.....	\$3,208,432	\$2,217,321	\$5,105,479
Augers, bits, gimlets, and countersinks (woodworking only), value.....	\$771,300	\$943,058	\$2,223,844
Cutting dies, for use in cutting cloth, paper, leather, etc. (not including metal-cutting dies), value.....	\$3,180,693	\$3,363,447	\$3,981,074
Other edge tools—chisels (except cold chisels), gouges, planes, draw knives, machetes, etc., value.....	\$2,245,250	\$1,863,008	\$5,003,948
Cutlery and edge tools not specifically reported, value.....	\$96,818		

<sup>1</sup> No comparable data.

TABLE 3.—FILES—PRODUCTION, BY KIND, NUMBER, AND VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929

	1933	1931	1929
1. "Files" industry, all products, total value.....	\$7,390,900	\$7,316,062	\$14,114,378
2. Files and rasps, value.....	\$7,120,822	\$6,831,791	\$13,380,289
3. Other products (not normally belonging to the industry) and receipts for repair work.....	\$270,078	\$484,271	\$734,089
4. Files and rasps made as secondary products in other industries, value.....	\$125,067	\$125,564	\$229,103
Files and rasps, aggregate value (2 and 4).....	\$7,245,889	\$6,957,355	\$13,609,392
Metal-working files and rasps, total value.....	\$6,920,570	\$6,658,906	\$13,030,895
Number reported:			
Dozens.....	5,178,858	5,091,079	8,247,179
Value.....	\$6,596,651	\$6,658,906	\$13,030,895
Number not reported, value.....	\$323,919		
Woodworking files and rasps, value.....	\$325,319	\$50,846	\$116,347
Other files and rasps, value.....		\$247,603	\$462,150



TABLE 4.—HARDWARE—PRODUCTION, BY KIND AND VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929

	1933	1931	1929
1. "Hardware not elsewhere classified" industry, all products, total value.....	\$85, 077, 477	\$115, 900, 290	\$229, 477, 507
2. Hardware.....	76, 904, 479	107, 066, 836	206, 417, 177
3. Other products (not normally belonging to the industry).....	8, 112, 998	8, 838, 455	23, 060, 330
4. Hardware (not elsewhere classified) made as secondary products in other industries, <sup>1</sup> value.....	4, 167, 415	8, 922, 060	14, 500, 655
Hardware (not elsewhere classified) aggregate (2 and 4).....	81, 131, 894	115, 988, 895	220, 917, 832
Builders' hardware, other than locks.....	15, 077, 639	28, 999, 869	58, 308, 832
Casket hardware.....	4, 215, 153	4, 806, 086	5, 912, 207
Furniture and cabinet hardware, other than locks.....	9, 332, 456	9, 454, 357	17, 538, 691
Saddlery and harness hardware.....	2, 239, 077	1, 664, 212	3, 773, 008
Trunk and suitcase hardware, other than locks.....	1, 361, 516	1, 110, 798	2, 486, 869
Locks, except motor-vehicle.....	8, 061, 379	13, 340, 511	95, 437, 243
Motor-vehicle hardware, including locks.....	26, 048, 401	33, 981, 597	
Vacuum bottles, jugs, etc.....	2, 144, 692	2, 706, 162	5, 406, 181
Other hardware, and hardware not reported by kind.....	12, 651, 581	19, 925, 303	31, 994, 851

<sup>1</sup> See third paragraph of text, p. 441.<sup>2</sup> Revised.

TABLE 5.—SAWS—PRODUCTION, BY KIND AND VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929

	1933	1931	1929
1. "Saws" industry, all products, total.....	\$9, 926, 388	\$11, 572, 385	\$22, 614, 958
2. Saws.....	7, 496, 519	8, 554, 616	18, 233, 237
3. Other products (not normally belonging to the industry), value, and receipts for repair work.....	2, 429, 860	3, 017, 769	4, 381, 721
4. Saws made as secondary products in other industries.....	615, 333	916, 519	2, 104, 729
Saws, aggregate (2 and 4).....	8, 111, 852	9, 471, 135	20, 397, 966
Woodworking saws, total.....	4, 595, 340	5, 187, 534	12, 085, 555
Power-saw blades.....	2, 616, 784	2, 925, 643	6, 743, 171
Other woodworking saws.....	1, 978, 556	2, 261, 891	5, 342, 384
Metal-working saws, total.....	3, 032, 929	4, 141, 571	6, 224, 798
Power-saw blades (except hack-saw).....	904, 774	924, 590	2, 629, 637
Hack-saw blades (hand and power).....	2, 128, 155	3, 216, 983	3, 595, 161
Other types of saws, and saws not distributed as to kind.....	483, 583	142, 028	2, 087, 613

TABLE 6.—SCREW-MACHINE PRODUCTS AND WOOD SCREWS—PRODUCTION, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929

	1933	1931	1929
1. "Screw-machine products and wood screws" industry, all products, total value.....	\$33, 449, 458	\$43, 697, 573	\$105, 974, 662
2. Screw-machine products and screws.....	26, 671, 175	35, 904, 603	87, 080, 909
3. Other products (not normally belonging to the industry).....	6, 778, 283	7, 792, 970	18, 893, 753
4. Screw-machine products and wood screws made as secondary products in other industries, value.....	5, 355, 347	17, 106, 026	17, 377, 446
Screw-machine products and wood screws, aggregate (2 and 4).....	32, 026, 522	143, 010, 629	104, 458, 355
Screw-machine products, value.....	27, 570, 313	137, 824, 596	91, 458, 307
Wood screws:			
Quantity reported:			
Gross.....	25, 803, 443	24, 979, 903	53, 605, 030
Value.....	\$3, 860, 799	\$4, 508, 022	\$10, 725, 174
Quantity not reported, value.....	\$586, 410	\$678, 011	\$2, 264, 814

<sup>1</sup> Revised.

TABLE 7.—WAGE EARNERS, BY QUARTERS, FOR SELECTED STATES: 1933 AND 1931

[The average for the year (table 1) differs from the average of the quarterly figures below. (See fourth sentence, sec. 13, p. 8.) See sec. 26, p. 13]

	1933 <sup>1</sup>				1931			
	March	June	September	December	March	June	September	December
<b>CUTLERY (NOT INCLUDING SILVER AND PLATED CUTLERY) AND EDGE TOOLS</b>								
United States.....	9,076	9,834	12,726	12,817	13,591	13,309	11,727	11,249
States								
Connecticut.....	1,085	1,804	2,691	2,786	2,843	2,583	2,476	2,488
Illinois.....	226	244	267	261	328	315	328	323
Massachusetts.....	1,326	1,372	1,890	1,634	2,495	2,709	1,660	1,662
Michigan.....	59	68	93	89	82	78	82	82
Missouri.....	625	697	768	848	590	584	542	576
New Hampshire.....	94	88	111	136	102	90	91	76
New Jersey.....	888	917	1,091	985	1,389	1,384	1,356	1,067
New York.....	1,887	2,047	2,866	2,845	3,041	2,869	2,747	2,402
Ohio.....	721	717	764	794	743	763	741	740
Pennsylvania.....	259	289	358	441	379	371	396	414
Wisconsin.....	164	169	204	254	178	175	159	163
<b>HARDWARE NOT ELSEWHERE CLASSIFIED</b>								
United States.....	27,379	32,005	36,101	36,497	38,251	36,794	34,333	34,486
States								
California.....	141	187	235	195	314	302	246	260
Connecticut.....	10,291	10,421	12,619	12,020	13,469	12,970	12,586	12,264
Illinois.....	2,953	3,526	3,699	3,716	3,879	3,866	3,770	3,514
Indiana.....	390	444	422	384	461	423	403	420
Iowa.....	180	224	229	202	335	305	256	235
Kentucky.....	113	135	158	186	196	176	151	144
Massachusetts.....	578	728	758	745	897	748	749	766
Michigan.....	6,082	9,053	8,786	10,682	7,935	7,551	6,609	7,359
Minnesota.....	34	34	37	37	66	63	51	54
Missouri.....	259	299	342	327	284	279	268	253
New Jersey.....	356	413	391	406	548	488	463	481
New York.....	1,235	1,687	2,029	1,780	2,233	2,172	2,000	1,917
Ohio.....	1,447	1,802	1,997	2,026	2,647	2,573	2,315	2,278
Pennsylvania.....	2,411	2,580	2,914	2,534	3,304	3,262	2,987	3,019
Rhode Island.....	62	60	106	81	74	66	89	98
Washington.....	39	35	36	30	47	68	48	61
Wisconsin.....	592	724	1,002	825	1,131	1,092	832	872
<b>SCREW-MACHINE PRODUCTS AND WOOD SCREWS</b>								
United States.....	7,519	10,107	12,519	11,928	13,398	12,574	11,026	10,679
States								
California.....	63	64	72	73	66	68	58	63
Connecticut.....	1,772	1,974	2,410	2,394	2,521	2,382	2,339	2,172
Illinois.....	901	1,131	1,458	1,447	1,594	1,519	1,462	1,479
Indiana.....	169	371	391	338	209	194	163	153
Massachusetts.....	722	953	1,389	1,269	1,178	1,117	999	973
Michigan.....	619	1,185	1,473	1,368	2,499	2,053	1,618	1,682
Missouri.....	39	55	59	53	64	46	44	39
New Jersey.....	94	108	125	126	158	169	162	141
New York.....	257	387	439	417	403	383	375	316
Ohio.....	1,724	2,569	3,215	3,170	3,164	3,116	2,374	2,238
Pennsylvania.....	402	516	577	594	542	543	486	485
Rhode Island.....	600	678	698	538	840	837	833	814
Wisconsin.....	40	77	140	94	77	68	55	63

For footnote, see end of table.

TABLE 7.—WAGE EARNERS, BY QUARTERS, FOR SELECTED STATES: 1933 AND 1931—Continued

[The average for the year (table 1) differs from the average of the quarterly figures below. (See fourth sentence, sec. 13, p. 8.) See sec. 26, p. 13]

	1933 <sup>1</sup>				1931			
	March	June	September	December	March	June	September	December
TOOLS, NOT INCLUDING EDGE TOOLS, MACHINE TOOLS, FILES OR SAWS								
United States.....	7,785	8,797	11,172	12,043	11,627	10,968	10,601	9,852
<i>States</i>								
California.....	76	89	115	89	112	105	104	74
Connecticut.....	1,126	1,289	1,605	1,675	1,887	1,768	1,745	1,715
Illinois.....	800	897	1,164	1,043	1,054	949	1,039	1,003
Indiana.....	166	166	223	263	324	331	324	237
Iowa.....	105	110	113	133	129	133	137	126
Massachusetts.....	853	869	1,184	1,261	1,192	1,190	977	889
Michigan.....	359	367	446	453	804	689	683	627
Minnesota.....	128	169	256	320	197	199	203	149
Missouri.....	96	111	127	113	164	143	150	126
New Jersey.....	283	304	386	392	610	590	526	429
New York.....	1,078	1,237	1,703	1,712	1,684	1,684	1,545	1,494
Ohio.....	887	1,136	1,353	1,703	1,238	1,197	1,169	1,184
Pennsylvania.....	860	924	1,023	1,126	1,159	1,101	1,041	953
Rhode Island.....	10	11	12	12	51	48	43	30
Vermont.....	150	142	157	176	177	158	160	161
Washington.....	8	7	6	19	16	17	12	13
West Virginia.....	408	575	784	1,047	254	168	184	164
Wisconsin.....	190	216	317	280	283	297	243	201

<sup>1</sup> See sec. 5, p. 4 and sec. 13, p. 8. The establishments canvassed with the standard schedule reported wage earners, by months, as follows:*Cutlery*—Establishments reported on standard schedule, 148.

January.....	8,486	May.....	8,952	September.....	12,308
February.....	9,027	June.....	9,469	October.....	12,790
March.....	8,735	July.....	10,000	November.....	12,927
April.....	8,599	August.....	11,335	December.....	12,384

*Hardware*—Establishments reported on the standard schedule, 221.

January.....	29,629	May.....	28,819	September.....	34,640
February.....	27,996	June.....	31,243	October.....	32,445
March.....	26,219	July.....	33,171	November.....	32,380
April.....	27,359	August.....	35,761	December.....	35,246

*Screw-machine products*—Establishments reported on the standard schedule, 165.

January.....	7,340	May.....	8,553	September.....	11,745
February.....	7,418	June.....	9,539	October.....	11,517
March.....	7,151	July.....	10,611	November.....	11,196
April.....	7,755	August.....	11,601	December.....	11,251

*Tools*—Establishments reported on the standard schedule, 176.

January.....	7,288	May.....	7,656	September.....	10,478
February.....	7,461	June.....	8,224	October.....	10,795
March.....	7,275	July.....	9,092	November.....	10,622
April.....	7,451	August.....	10,064	December.....	11,348

## FIREARMS

(A preliminary report for this industry was issued under date of May 12, 1934)

**Description of the industry.**—The "Firearms" industry, according to the census classification, consists in the manufacture of unmounted firearms—weapons made to be fired from the hand or from the shoulder—and of their parts. Commercial manufacturers only are classified in this industry, no data having been collected from Government establishments.

**Extent of coverage.**—The Census coverage of this industry was practically complete. Of the 22 establishments that reported for 1931, 1 failed to supply any information in regard to its status (active, idle, etc.) or activities in 1933; but this establishment accounted for less than one-tenth of 1 percent of the total value of products reported for this industry for 1931.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1 2</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
Thousands of dollars. (See sec. 25, p. 13)								
United States								
1933.....	22	558	3,382	858	3,164	2,169	9,214	7,045
1931.....	24	( <sup>4</sup> )	4,264	( <sup>4</sup> )	4,711	2,501	10,611	8,110
1929.....	21	908	6,838	1,980	9,210	4,117	21,970	17,853
1927.....	20	754	6,130	1,680	7,934	5,048	19,452	14,405
States								
Massachusetts:								
1933.....	4	106	466	144	387	189	919	730
1931.....	4	( <sup>4</sup> )	668	( <sup>4</sup> )	739	329	1,554	1,225
Other States: <sup>5</sup>								
1933.....	18	452	2,916	714	2,776	1,980	8,295	6,315
1931.....	20	( <sup>4</sup> )	3,596	( <sup>4</sup> )	3,972	2,173	9,057	6,884

<sup>1</sup> Not including proprietors and firm members, as follows: 1933, 5; 1931, no data; 1929, 1; 1927, 1.<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.<sup>4</sup> No data.<sup>5</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Calif., 2, 2; Colo., 1, 1; Conn., 6, 7; Mich., 1, 2; Mo., 0, 1; N. J., 1, 1; N. Y., 4, 4; Pa., 3, 2.

TABLE 2.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929

[See sec. 25, p. 13]

	Quantity in thousands			Value in thousands of dollars		
	1933	1931	1929	1933	1931	1929
1. "Firearms" industry, all products, total.....	-----	-----	-----	9,214	10,611	21,970
2. Firearms and parts.....	-----	-----	-----	6,556	7,708	17,353
3. Other products (not normally belonging to the industry).....	-----	-----	-----	2,449	2,571	3,554
4. Custom work and repairing.....	-----	-----	-----	209	333	1,064
5. Firearms and parts made as secondary products in other industries.....	-----	-----	-----	18	98	349
Firearms and parts, aggregate (2 and 5).....	-----	-----	-----	6,573	7,805	17,701
Pistols and revolvers.....	55	115	225	873	1,521	2,975
Rifles, total.....	313	355	458	1,782	2,335	4,572
Repeating.....	110	110	( <sup>1</sup> )	1,176	1,551	( <sup>1</sup> )
Single-shot.....	204	245	( <sup>1</sup> )	607	774	( <sup>1</sup> )
Shotguns, total.....	123	198	589	1,467	2,939	8,856
Single-barrel:						
Repeating.....	64	65	( <sup>1</sup> )	1,027	1,750	( <sup>1</sup> )
Single-shot.....	51	93	( <sup>1</sup> )	219	500	( <sup>1</sup> )
Double-barrel.....	8	40	( <sup>1</sup> )	221	689	( <sup>1</sup> )
Parts and accessories.....	-----	-----	-----	2,451	2,011	2,288

<sup>1</sup> Not reported separately.<sup>2</sup> The figures for the 3 years include data for small quantities of ordnance and ordnance accessories made by commercial manufacturers, and the figure for 1933 includes also the value of an indeterminate quantity of special-type shotguns. These values cannot be shown separately without disclosing approximations of the production of individual establishments.

## PLUMBERS' SUPPLIES, NOT INCLUDING PIPE OR VITREOUS-CHINA SANITARY WARE

[A preliminary report for this industry was issued on Sept. 14, 1934]

**Description of the industry.**—This industry embraces establishments whose principal products are porcelain-enameled (enameled-iron) sanitary ware (bathtubs, laundry tubs, lavatories, and sinks), plumbers' brass goods, plumbers' woodwork, galvanized-iron and copper range boilers, and miscellaneous bathroom and other fixtures closely related to plumbing work.

Manufacturers of vitreous-china and semivitreous or porcelain (all-clay) sanitary ware are classified in the "Pottery" industry, and producers of concrete laundry trays are classified in the "Concrete products" industry, but production figures for these classes of sanitary ware are included in table 3 because of the close relation between them and the specific products of the "Plumbers' supplies" industry.

**Extent of coverage.**—The 1933 coverage of the establishments reporting in this industry for 1931 was practically complete. Of the 238 such establishments, only 6 failed to supply any information in regard to their status (active, idle, etc.) or their activities in 1933, and these establishments accounted for only a small fraction of 1 percent of the total number of wage earners and of the total value of products reported for the industry for 1931.

453

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
<i>Thousands of dollars. (See sec. 25, p. 13)</i>								
<i>United States</i>								
1933.....	232	1,938	15,893	2,930	12,922	17,561	48,886	29,325
1931.....	238	( <sup>4</sup> )	19,688	( <sup>4</sup> )	20,440	26,003	70,936	44,933
1929.....	255	3,343	27,960	9,301	37,067	49,033	129,674	80,041
1927.....	231	3,769	29,245	9,361	40,212	55,633	145,262	89,629
<i>States</i>								
<i>California:</i>								
1933.....	14	77	654	115	589	677	1,850	1,172
1931.....	13	( <sup>4</sup> )	885	( <sup>4</sup> )	1,087	1,019	2,923	1,904
<i>Connecticut:</i>								
1933.....	11	90	841	145	742	837	2,003	1,227
1931.....	11	( <sup>4</sup> )	730	( <sup>4</sup> )	817	830	2,756	1,927
<i>Illinois:</i>								
1933.....	29	268	1,799	427	1,268	1,652	5,061	3,400
1931.....	31	( <sup>4</sup> )	2,235	( <sup>4</sup> )	2,275	3,066	8,469	5,402
<i>Indiana:</i>								
1933.....	9	46	289	60	205	477	910	433
1931.....	10	( <sup>4</sup> )	517	( <sup>4</sup> )	458	790	1,700	910
<i>Massachusetts:</i>								
1933.....	21	75	545	110	507	1,284	2,648	1,804
1931.....	17	( <sup>4</sup> )	579	( <sup>4</sup> )	708	1,666	3,271	1,605
<i>Michigan:</i>								
1933.....	16	86	753	106	507	912	2,261	1,350
1931.....	15	( <sup>4</sup> )	839	( <sup>4</sup> )	813	1,403	3,481	2,078
<i>Missouri:</i>								
1933.....	5	22	137	30	97	118	343	225
1931.....	5	( <sup>4</sup> )	159	( <sup>4</sup> )	168	118	456	337
<i>New Jersey:</i>								
1933.....	11	98	530	150	520	1,044	2,156	1,111
1931.....	15	( <sup>4</sup> )	991	( <sup>4</sup> )	1,177	1,618	3,985	2,367
<i>New York:</i>								
1933.....	19	80	477	130	413	984	1,995	1,011
1931.....	25	( <sup>4</sup> )	600	( <sup>4</sup> )	739	1,516	3,109	1,593
<i>Ohio:</i>								
1933.....	32	185	1,679	300	1,446	1,725	4,826	3,102
1931.....	33	( <sup>4</sup> )	1,966	( <sup>4</sup> )	2,283	2,705	7,624	4,819
<i>Pennsylvania:</i>								
1933.....	29	362	2,400	570	1,860	3,239	7,267	4,028
1931.....	28	( <sup>4</sup> )	3,323	( <sup>4</sup> )	3,405	5,110	12,626	7,516
<i>Wisconsin:</i>								
1933.....	14	273	2,438	405	1,878	2,049	6,273	4,224
1931.....	12	( <sup>4</sup> )	2,203	( <sup>4</sup> )	2,328	2,915	8,361	5,447
<i>Other States:<sup>5</sup></i>								
1933.....	22	276	3,350	383	2,891	2,564	9,233	6,070
1931.....	23	( <sup>4</sup> )	4,661	( <sup>4</sup> )	4,176	3,246	12,274	9,028

<sup>1</sup> Not including proprietors and firm members, as follows: 1933, 52; 1931, no data; 1929, 50; 1927, 111.<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.<sup>3</sup> Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.<sup>4</sup> No data.<sup>5</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Alabama, 1, 1; Delaware, 2, 2; Iowa, 2, 2; Kansas, 1, 1; Kentucky, 1, 1; Maine, 2, 1; Maryland, 4, 6; Minnesota, 1, 1; New Hampshire, 0, 1; Rhode Island, 2, 2; Tennessee, 1, 1; Texas, 1, 0; Vermont, 1, 1; Virginia, 1, 1; Washington, 1, 1; West Virginia, 1, 1.

TABLE 2.—PRODUCTS, BY KIND, NUMBER, AND VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929

	1933			1931			1929		
1. "Plumbers' supplies, not including pipe or vitreous-china sanitary ware" industry, all products, total value.....	\$46,885,968			\$70,935,802			\$129,673,784		
2. Plumbers' supplies, not including pipe, vitreous-china sanitary ware, or semivitreous or porcelain (all-clay) sanitary ware.....	42,379,360			62,885,943			114,829,771		
3. Other products (not normally belonging to the industry).....	4,506,638			8,049,949			14,844,013		
4. Plumbers' supplies made as secondary products in other industries <sup>1</sup> .....	3,464,635			<sup>2</sup> 8,301,643			<sup>2</sup> 12,018,244		
Plumbers' supplies, etc., aggregate value (2 and 4).....	45,843,995			<sup>2</sup> 71,187,586			<sup>2</sup> 126,848,015		

  

	NUMBER IN THOUSANDS <sup>3</sup>			VALUE IN THOUSANDS OF DOLLARS <sup>4</sup>		
	1933	1931	1929	1933	1931	1929
Plumbers' supplies, <sup>1</sup> not including pipe, vitreous-china sanitary ware, or semivitreous or porcelain (all-clay) sanitary ware, aggregate.....				45,844	71,188	126,848
Enameled-iron sanitary ware, <sup>4</sup> total.....				12,950	21,353	45,288
Bathtubs.....	292	445	944	5,103	9,438	21,355
Laundry tubs.....	81	50	175	1,046	869	3,011
Lavatories.....	443	521	1,117	2,478	3,749	8,050
Sinks.....	486	622	1,211	4,211	6,810	12,872
Flush tanks.....	10	18	( <sup>5</sup> )	65	147	( <sup>5</sup> )
Drinking fountains.....	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	47	340	( <sup>5</sup> )
Range boilers and hot-water storage tanks, for domestic use: <sup>7</sup>						
Galvanized-iron.....	654	718	783	4,251	4,231	4,616
Copper.....	41	45	35	1,167	1,196	1,294
Faucets and spigots reported separately.....				<sup>8</sup> 4,699	<sup>8</sup> 8,312	<sup>2</sup> 54,991
Other plumbers' brass goods, including faucets and spigots, not separately reported, made in the "Plumbers' supplies" industry <sup>1</sup> .....				16,794	24,547	
Toilet seats, all types:						20,659
Number reported.....	1,126	2,082		1,869	4,260	
Number not reported.....				624		
Other plumbers' supplies.....				3,490	7,288	

<sup>1</sup> Includes faucets and spigots so far as separately reported, but does not include valves, fittings, and other plumbers' brass goods, made as secondary products in other industries. (The figures for 1929 and 1931, as given in the 1931 report, did not include data for faucets and spigots made in other industries.) For total production of valves, fittings, etc., see report for "Foundry and machine-shop products" industry.

<sup>2</sup> Revised to include data for faucets and spigots made as secondary products in other industries. See footnote 1.

<sup>3</sup> See sec. 25, p. 13.

<sup>4</sup> For total production of sanitary ware, including vitreous-china and semivitreous or porcelain (all-clay) sanitary ware and concrete laundry trays, see table 3, p. 456.

<sup>5</sup> Not reported separately; value included in figure for "Other plumbers' supplies."

<sup>6</sup> Data incomplete.

<sup>7</sup> For water heaters, see table 2, p. 471.

<sup>8</sup> Value of total production so far as separately reported, regardless of industry classification.

<sup>9</sup> For total production of valves, fittings, etc., see report for "Foundry and machine-shop products" industry, table 4, p. 556.



TABLE 3.—SANITARY WARE—TOTAL PRODUCTION, BY KIND, QUANTITY, AND VALUE: 1929 TO 1933

[See second paragraph of text, p. 453]

	QUANTITY			VALUE IN THOUSANDS OF DOLLARS <sup>1</sup>		
	1933	1931	1929	1933	1931	1929
Aggregate value.....				21,587	36,789	75,347
Enameled-iron sanitary ware (for detail, see table 2), total.....				12,950	21,353	45,288
Vitreous-china plumbing fixtures (exclusive of fittings), total.....				7,709	12,894	24,002
Bathroom and toilet fixtures:						
Closet bowls.....	<i>Number</i>	<i>Number</i>	<i>Number</i>			
Siphon jets.....	52,908	170,918	317,672	311	1,356	2,000
Washdowns.....	750,083	746,264	1,364,804	2,319	2,746	5,651
Reverse traps.....	61,167	87,658	207,221	273	443	1,005
Flush tanks:						
Lowdown (large and small)....	784,741	788,415	1,202,396	2,833	3,709	6,477
Other.....	2,660	3,985	19,776	10	22	138
Lavatories.....	80,450	226,346	347,809	760	2,513	4,780
Other bathroom and toilet fixtures.....				697	1,363	3,303
Other vitreous-china fixtures.....				502	632	1,462
Semivitreous or porcelain (all-clay) plumbing fixtures (exclusive of fittings), total.....				647	1,995	3,965
Laundry tubs and kitchen sinks.....	19,014	54,920	( <sup>2</sup> )	178	453	520
Other semivitreous fixtures.....				469	1,542	3,436
Concrete laundry trays.....	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>			
	9,964	19,438	36,430	281	547	1,102

<sup>1</sup> See sec. 25, p. 13.<sup>2</sup> No data.

TABLE 4.—WAGE EARNERS, BY QUARTERS, FOR SELECTED STATES: 1933 AND 1931

[The average for the year (table 1) differs from the average of the quarterly figures below. (See fourth sentence, sec. 13, p. 8.) See sec. 26, p. 13]

	1933 <sup>1</sup>				1931			
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
United States.....	13,903	17,320	19,061	14,816	20,533	20,355	19,517	17,034
<i>States</i>								
California.....	450	741	898	515	922	791	945	765
Connecticut.....	566	884	1,149	857	759	764	726	628
Illinois.....	1,741	1,794	1,955	1,725	2,333	2,239	2,175	2,106
Indiana.....	211	328	381	236	473	632	476	449
Maryland.....	189	188	189	196	848	827	872	819
Massachusetts.....	415	594	640	495	582	585	578	569
Michigan.....	527	737	956	753	842	883	818	793
Missouri.....	109	146	160	148	174	161	148	145
New Jersey.....	402	541	699	525	1,198	1,149	808	654
New York.....	377	492	567	456	598	604	607	549
Ohio.....	1,327	1,857	2,017	1,556	1,946	2,026	1,829	1,919
Pennsylvania.....	2,109	2,597	2,713	2,444	3,390	3,417	3,386	2,857
Wisconsin.....	2,218	2,479	2,682	2,443	2,195	2,257	2,208	2,133

<sup>1</sup> See secs. 5, p. 4, and 13, p. 8. The 159 establishments canvassed with the standard schedule reported wage earners, by months, as follows:

January.....	11,962	May.....	15,226	September.....	18,300
February.....	12,785	June.....	16,641	October.....	17,690
March.....	13,395	July.....	17,892	November.....	15,514
April.....	12,743	August.....	17,074	December.....	14,151

## STEEL-WORKS AND ROLLING-MILL PRODUCTS

[A preliminary report for this industry was issued Sept. 6, 1934]

**Description of the industry.**—This industry consists in the conversion of pig iron and scrap into steel and the rolling of iron and steel. In many cases the processes of conversion and rolling are performed in the same plants, and in such cases the value of products represents only the finished products. Some steel plants, however, produce crude steel or partly rolled steel, which is used as a material by other steel plants, and this causes some degree of duplication in the figures for value of products and cost of materials.

The amount of duplication in the total value of products for the industry can not be accurately determined, but it is equal to the sum of the major part of the value (\$139,880,622) of the ingots and semi-finished rolled products (except for forgings) made for sale and for "interplant transfer" (transfer to other plants under the same ownership) and a considerable part<sup>1</sup> of the value (\$48,997,029) of the interplant transfers of direct steel castings, forgings, and finished rolled products made in certain plants and transferred to other plants under the same ownership for use as materials in further manufacture. All but a small portion of the ingots and semifinished rolled products manufactured for sale and for interplant transfer, and to a considerable extent the steel castings, forgings, and finished rolled products transferred to other plants, are used as materials within the industry, and therefore their values as finished products are again included in the total value of products. As the tonnage produced and consumed in different departments of the same plant does not carry an assigned value, no duplication arises from this source.

**Further-manufactured products.**—Many establishments operate departments that carry the manufacturing processes beyond the rolling stage. For example: Tin-dipping departments are operated by some of the black-plate rolling mills, wire-drawing departments by wire-rod mills, and pipe-and-tube departments by skelp mills; and rolling-mill products are also converted by such departments into bolts and nuts, cut nails and spikes, and other finished wire and iron and steel products. These products when manufactured in plants other than departments of rolling mills are classified in other industries, and for this reason the "Steel-works and rolling-mill products" industry overlaps a number of others, and the products include certain commodities identical in character with the primary products of other industries. The total output of these products, by kind, quantity, and value, as reported for all industries, is shown, so far as practicable, in table 4, page 464.

Tin plate and terneplate are manufactured almost exclusively and wire and wire products are made to a considerable extent in departments operated in connection with rolling mills. Statistics showing

<sup>1</sup> 43 percent for 1931, according to a special study of the figures for that year.

the total output of these commodities will be found in separate sections of this report. (See "Tin plate and terneplate," p. 481, and "Wire drawn from purchased rods," p. 482.)

A large part of the pig iron used as a material by steel works is delivered, mostly in a molten state, by blast furnaces operated in conjunction with the steel works. (See "Relation of blast-furnace products and steel-works and rolling-mill products industries," p. 429.)

**Steel castings.**—Steel foundries are classified for census purposes in the "Steel-works and rolling-mill products" and the "Foundry and machine-shop products" industries, according to the character of their chief products. The data for wage earners, wages, and cost of materials, fuel, and purchased electric energy for the casting departments of steel works and of iron foundries and machine shops are included in the respective items for the establishments as a whole and can not be segregated. The data for production and consumption in further manufacture in the same works are substantially complete for the classes of establishments covered by table 5, but do not include data for certain establishments in other industries—for example, those engaged in the manufacture of motor vehicles, engines, pumps, and agricultural implements—which are not required to report such production and consumption to the Bureau of the Census. The total production as given in this report does not, therefore, represent the entire production of steel castings in all industries, but it does cover with substantial completeness the production made for sale or interplant transfer.

**Extent of coverage.**—All the establishments in this industry that reported at the census for 1931 were accounted for in the canvass for 1933.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, furnace and mill supplies, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
Thousands of dollars. (See sec. 25, p. 13)								
<i>United States</i>								
1933.....	394	23,387	276,847	45,296	258,803	692,089	1,143,889	451,800
1931.....	446	( <sup>4</sup> )	264,634	( <sup>4</sup> )	338,387	831,884	1,402,843	570,959
1929.....	486	36,937	394,574	103,433	689,016	1,904,083	3,365,789	1,401,706
1927.....	486	36,019	361,312	97,200	601,275	1,689,655	2,779,840	1,090,185
<i>States</i>								
<i>California:</i>								
1933.....	17	319	4,289	606	4,624	7,604	17,511	9,847
1931.....	19	( <sup>4</sup> )	4,510	( <sup>4</sup> )	5,086	7,851	15,685	7,834
<i>Illinois:</i>								
1933.....	32	2,405	17,005	4,682	17,748	56,730	89,469	32,739
1931.....	37	( <sup>4</sup> )	19,079	( <sup>4</sup> )	23,679	65,270	106,654	41,384
<i>Indiana:</i>								
1933.....	17	1,694	22,379	3,620	25,234	71,604	116,190	44,686
1931.....	18	( <sup>4</sup> )	18,641	( <sup>4</sup> )	28,344	87,073	137,995	50,922
<i>Michigan:</i>								
1933.....	15	423	5,555	803	7,085	16,760	30,119	13,359
1931.....	16	( <sup>4</sup> )	5,249	( <sup>4</sup> )	7,883	16,235	30,144	13,909

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1,2</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, furnace and mill supplies, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
<i>Thousands of dollars. (See sec. 25, p. 13)</i>								
<i>States—Continued</i>								
Missouri:								
1933.....	7	271	1,979	531	1,877	3,490	8,006	4,515
1931.....	8	( <sup>4</sup> )	2,336	( <sup>4</sup> )	2,731	4,321	9,482	5,161
New Jersey:								
1933.....	10	828	4,953	1,490	4,383	8,089	16,296	8,206
1931.....	12	( <sup>4</sup> )	5,499	( <sup>4</sup> )	6,746	12,700	23,062	10,362
New York:								
1933.....	22	956	10,266	1,777	10,011	22,089	38,412	16,323
1931.....	24	( <sup>4</sup> )	10,175	( <sup>4</sup> )	14,145	30,585	54,916	24,331
Ohio:								
1933.....	62	4,110	64,286	7,980	61,684	189,492	289,447	99,955
1931.....	74	( <sup>4</sup> )	58,088	( <sup>4</sup> )	74,594	206,082	325,846	119,764
Oregon:								
1933.....	3	33	179	43	212	169	654	485
1931.....	3	( <sup>4</sup> )	175	( <sup>4</sup> )	202	151	592	441
Pennsylvania:								
1933.....	131	8,825	101,534	17,251	85,203	222,445	366,529	144,084
1931.....	146	( <sup>4</sup> )	98,332	( <sup>4</sup> )	122,100	293,123	483,335	190,212
West Virginia:								
1933.....	13	720	13,365	1,580	12,948	24,806	47,379	22,572
1931.....	14	( <sup>4</sup> )	9,830	( <sup>4</sup> )	14,542	26,335	56,364	30,029
Wisconsin:								
1933.....	12	213	2,133	415	1,657	2,938	5,775	2,837
1931.....	15	( <sup>4</sup> )	3,052	( <sup>4</sup> )	3,303	5,016	10,880	5,864
Other States: <sup>6</sup>								
1933.....	53	2,590	28,924	4,519	26,136	65,812	118,103	52,291
1931.....	60	( <sup>4</sup> )	29,668	( <sup>4</sup> )	35,030	77,142	147,888	70,746

<sup>1</sup> Not including proprietors and firm members, as follows: 1933, 3; 1931, no data; 1929, 17; 1927, 16.<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.<sup>3</sup> Value of products less cost of materials, furnace and mill supplies, fuel, and purchased electric energy. See sec. 20, p. 11.<sup>4</sup> No data.<sup>5</sup> Does not include cost of furnace and mill supplies and therefore is not strictly comparable with figures for other years.<sup>6</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Ala., 8; Colo., 3; Conn., 3; Del., 3; Ga., 2; Iowa, 2; Ky., 3; La., 1; Maine, 1; Md., 4; Mass., 5; Minn., 4; Okla., 1; R. I., 1; Tenn., 2; Tex., 2; Utah, 1; Va., 2; Wash., 5.

TABLE 2.—NUMBER OF ESTABLISHMENTS AND VALUE OF PRODUCTS, BY CLASS OF ESTABLISHMENTS, FOR THE UNITED STATES: 1929 TO 1933

	Total	Establishments engaged both in producing steel and in rolling iron and steel	Establishments engaged in producing steel but not in rolling	Establishments engaged in rolling iron and steel but not in producing steel	PERCENT OF TOTAL		
					Steel works and rolling mills	Steel works only	Rolling mills only
Establishments:							
1933.....	394	114	136	144	28.9	34.5	36.5
1931.....	446	118	163	165	26.5	36.5	37.0
1929.....	486	124	172	190	25.5	35.4	39.1
Value of products:							
1933.....	\$1, 143, 889, 074	\$782, 245, 007	\$36, 219, 611	\$325, 424, 456	68.4	3.2	28.4
1931.....	1, 402, 843, 188	947, 902, 370	75, 651, 209	379, 289, 609	67.6	5.4	27.0
1929.....	3, 365, 788, 805	2, 302, 211, 836	217, 343, 402	845, 233, 567	68.4	6.5	25.1

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929

[See "Description of the industry," p. 457, second paragraph, in regard to duplication in total value of products. Value figures for products "Transferred for consumption in other plants of same companies" represent assigned values]

	NUMBER OF ESTABLISHMENTS				TONS OF 2,240 POUNDS				VALUE			
	1933	1931	1929		1933	1931	1929		1933	1931	1929	
Total value.....												
Unrolled steel, total <sup>1</sup> .....					23, 162, 713	25, 395, 640	56, 160, 683		\$1, 143, 889, 074	\$1, 402, 843, 188	\$3, 365, 788, 805	
Ingots, total.....					22, 883, 941	26, 436, 339	54, 793, 683					
Made for sale.....					27, 283	50, 680	195, 634					
Transferred for consumption in other plants of same companies.....					105, 520	192, 660	465, 309		1, 038, 095	1, 687, 923	6, 239, 183	
Produced and consumed in same works.....					22, 761, 138	26, 192, 999	54, 132, 740		2, 873, 894	3, 860, 568	10, 910, 385	
Direct steel castings, total.....					1, 278, 772	459, 301	1, 367, 000					
Made for sale.....					1, 210, 936	352, 437	1, 158, 823		130, 837, 582	57, 153, 225	183, 480, 786	
Transferred for consumption in other plants of same companies.....					11, 396	18, 116	52, 952		1, 438, 261	2, 403, 456	7, 916, 915	
Produced and consumed in same works.....					1, 56, 440	83, 743	155, 225					
Semifinished rolled products, total.....					21, 543, 943	23, 554, 357	48, 528, 607					
Made for sale.....					3, 228, 874	2, 723, 265	6, 714, 525		82, 620, 442	81, 521, 225	235, 550, 793	
Transferred for consumption in other plants of same companies.....					2, 243, 413	2, 904, 438	6, 004, 634		55, 336, 589	80, 151, 350	185, 776, 910	
Produced and consumed in same works.....					16, 073, 656	17, 851, 533	35, 749, 447					
Blooms, billets, and slabs, steel (except for forging), total <sup>1</sup> .....					16, 549, 999	18, 724, 175	33, 819, 107					
Made for sale.....					1, 485, 593	871, 987	2, 727, 604		40, 269, 687	27, 545, 558	100, 373, 379	
Transferred for consumption in other plants of same companies.....					1, 539, 326	2, 235, 427	4, 633, 624		39, 229, 264	63, 564, 140	144, 418, 740	
Produced and consumed in same works.....					13, 525, 110	16, 016, 861	31, 457, 879					
Roller blooms and billets for forging, total.....					121, 195	172, 946	657, 808					
Made for sale and for interplant transfer.....					64, 138	60, 398	209, 676		2, 008, 338	2, 494, 287	10, 326, 862	
Produced and consumed in same works.....					4, 787, 064	4, 564, 915	858, 133					
Sheet and tin-plate bars, total.....					1, 677, 654	1, 791, 833	3, 751, 311					
Made for sale.....					691, 632	647, 265	1, 310, 421		40, 284, 633	51, 543, 862	125, 657, 607	
Transferred for consumption in other plants of same companies.....					2, 417, 798	2, 125, 817	3, 649, 189		15, 741, 738	16, 741, 618	36, 658, 608	
Produced and consumed in same works.....					85, 665	122, 551	340, 771					
Muck and scrap bar, total.....												
Made for sale and for interplant transfer.....					11, 974	16, 944	86, 525		423, 381	778, 110	3, 892, 507	
Produced and consumed in same works.....					73, 691	105, 607	254, 246					

Finished rolled products and forgings, total '4									
Made for sale.									
Transferred for consumption in other plants of same companies.									
Produced and consumed in same works.									
Rails, total.	15	14	17						
Made for sale and for interplant transfer.									
Produced and consumed in same works.									
Rerolled or renewed rails (not including rails rerolled by makers of ingots from new seconds), for sale and for interplant transfer.									
Rail joints and fastenings, tie-plates, etc., total.	4	3	7						
Made for sale and for interplant transfer.	30	27	30						
Produced and consumed in same works.									
Structural shapes (not assembled or fabricated), total.	48	49	42						
Heavy (leg or web 3 inches and over) made for sale and for interplant transfer.									
Light (leg or web less than 3 inches) made for sale and for interplant transfer.									
Heavy and light, produced and consumed in same works.									
Concrete-reinforcing bars (including twisted bars), made for sale and for interplant transfer.	57	55	57						
Merchant bars, mill shafting, etc., total.	100	107	120						
Steel bars, total.									
Open-hearth and Bessemer:									
Made for sale.									
Transferred for consumption in other plants of same company.									
Electric and crucible steel bars, made for sale and for interplant transfer.									
Produced and consumed in same works (open-hearth, Bessemer, electric-steel, and crucible-steel bars).									
Iron bars, total.									
Made for sale.									
Transferred for consumption in other plants of same companies.									
Produced and consumed in same works.									
Wire rods, total.	49	47	48						
Made for sale.									
Transferred for consumption in other plants of same companies.									
Produced and consumed in same works.									

For footnotes, see end of table.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929—Continued

[See note at head of table]

	NUMBER OF ESTABLISHMENTS		TONS OF 2,240 POUNDS				VALUE	
	1933	1931	1929	1933	1931	1929	1933	1929
Finished rolled products and forgings—Continued.								
Bolt and nut rods and spike and chain rods, total.....	25	27	30	151,196	179,538	433,283		
Made for sale and for interplant transfer, total.....				33,969	19,842	120,980		
Bolt and nut rods, produced and consumed in same works.....				63,948	87,901	156,417		
Spike and chain rods, produced and consumed in same works.....				53,279	71,705	156,886	\$842,686	\$5,083,340
Plates (No. 12 and thicker), not coated, total.....	52	60	60	1,462,352	2,046,426	5,284,879		
Crucible and electric plate steel and saw plates, made for sale and for interplant transfer.....				7,414	3,448	4,131		
Stainless steel, made for sale and for interplant transfer.....				2,146	( <sup>e</sup> )	( <sup>e</sup> )	1,528,713	1,054,927
Boiler and other plate, not elsewhere specified, total.....				1,452,832	2,042,978	5,280,748	971,416	( <sup>e</sup> )
Made for sale.....				1,314,114	1,896,069	5,094,300		
Transferred for consumption in other plants of same companies.....				82,400	86,656	120,509	48,138,546	221,692,771
Produced and consumed in same works.....				56,318	60,253	65,930	2,792,381	2,879,523
Made for sale and for interplant transfer.....				5,026,391	4,171,262	7,284,905		
Produced and consumed in same works.....	75	88	92	400,141	418,499	1,163,772	22,264,827	109,104,266
Automobile-body, made for sale and for interplant transfer.....				122,748	114,094	143,200	7,082,148	7,651,763
Black for tinning (tin-mill black plate):.....				1,666,265	1,361,970	1,827,193		
Made for sale and for interplant transfer.....				2,154,557	1,488,683	2,794,077	102,068,473	187,652,840
Produced and consumed in same works.....				674,440	798,076	1,416,663		
Made for sale.....				8,231	1,472,213	3,598,050	4,963,184	( <sup>e</sup> )
Produced and consumed in same works.....	33	34	39	1,016,913	1,472,213	3,598,050		
Skelp, total.....				275,329	306,568	654,721		
Made for sale.....				192,232	312,733	616,634	10,412,935	25,414,922
Produced and consumed in same works.....				549,352	852,912	2,286,695	10,906,937	24,700,271
Cotton ties, made for sale.....	4	4	5	45,733	47,551	38,216		
Hoops, bands, and strips, total.....	53	47	44	1,492,213	1,402,820	2,726,171	1,487,954	1,831,934
Made for sale.....				431,500	402,437	381,859		
Produced and consumed in same works.....				23,093	280,528	585,502	17,087,744	16,687,505
Hot-rolled strips and flats for cold rolling (less than 24 inches in width):.....				270,080	592,866	70,873	18,052,479	4,659,018
Transferred for consumption in other plants of same companies.....				674,880	592,866	1,456,929	27,123,101	70,201,164
Produced and consumed in same works.....				21,260	64,671	70,873	2,729,612	3,583,073
Made for sale.....				71,400	62,323	136,209		
Produced and consumed in same works.....								

	8	10	11	54, 578	26, 884	150, 448	2, 788, 392	2, 238, 631	12, 038, 622
Axles, rolled and forged, made for sale and for interplant transfer.....									
Car and locomotive wheels, rolled and forged, made for sale and for interplant transfer.....	6	8	8	69, 288	84, 405	209, 182	6, 486, 221	7, 689, 367	19, 352, 111
Armor plate and ordnance, made for sale.....	7	5	6	7, 510	17, 212	9, 939	2, 080, 491	6, 184, 886	3, 287, 261
Sheet piling, plain, made for sale and for interplant transfer.....	4	3		42, 451	63, 276	( <sup>1</sup> )	1, 637, 825	2, 525, 644	( <sup>1</sup> )
Rollled and forged iron and steel products, not elsewhere specified, total.....				238, 774	278, 632	937, 371			
Made for sale.....				143, 478	167, 601	534, 419			
Transferred for consumption in other plants of same companies.....				44, 976	30, 024	141, 440	15, 367, 546	19, 059, 587	57, 482, 580
Produced and consumed in same works.....				50, 320	71, 917	241, 512	2, 329, 414	2, 634, 019	8, 862, 992
Scrap iron and steel, total.....				7, 203, 680	8, 305, 174	16, 818, 460			
Made for sale.....				637, 199	850, 290	1, 871, 891			
Transferred for consumption in other plants of same companies.....				343, 753	558, 644	988, 170	6, 991, 501	10, 450, 074	28, 894, 147
Produced and consumed in same works.....				6, 175, 738	6, 896, 240	13, 988, 399	3, 263, 656	6, 194, 577	13, 207, 281
Cinder and scale, total.....				1, 355, 853	1, 508, 525	3, 340, 598			
Made for sale.....				173, 167	217, 162	432, 010			
Transferred for consumption in other plants of same companies.....				533, 514	403, 300	762, 322	386, 466	509, 088	1, 163, 744
Produced and consumed in same works.....				647, 172	888, 063	2, 146, 256	882, 555	799, 308	1, 667, 313
Miscellaneous products other than iron and steel.....									
Receipts for custom and repair work.....									
Finished and altered products made in departments operated in connection with steel works and rolling mills from finished rolling-mill and foundry products.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									
Total.....									
Made for sale.....									
Transferred for consumption in other plants of same companies.....									
Produced and consumed in same works.....									



TABLE 4.—PRINCIPAL MANUFACTURES FROM ROLLING-MILL PRODUCTS OTHER THAN TIN PLATE AND TERNEPLATE AND WIRE AND WIRE PRODUCTS—PRODUCTION, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929

The phrase "Made in rolling-mill industry," as here used, refers to products manufactured in departments operated in connection with steel works and rolling mills]

KIND	Establishments, 1933 <sup>1</sup>	QUANTITY			VALUE IN THOUSANDS OF DOLLARS (SEE SEC. 25, P. 13)		
		1933 <sup>2</sup>	1931	1929	1933 <sup>2</sup>	1931	1929
Railroad spikes, all industries <sup>3</sup> .....	19	<i>Kegs, 200-lb.</i> 678, 417	<i>Kegs, 200-lb.</i> 829, 629	<i>Kegs, 200-lb.</i> 1,857, 105	3, 141	4, 338	10, 338
Bolts, nuts, rivets, washers, etc., total.....	198				43, 013	49, 845	125, 508
Made in rolling-mill industry.....	26				6, 792	8, 477	18, 890
Made in other industries.....	172				36, 221	41, 369	107, 618
Iron and steel:							
Bolts and nuts:							
Quantity reported.....	103	{ 2, 183, 330 }			{ 25, 744 }	{ 5, 798 }	
Quantity not reported.....							
Rivets:							
Quantity reported.....	59	{ 637, 900 }			{ 4, 391 }	{ 374 }	
Quantity not reported.....							
Washers:							
Quantity reported.....	35	{ 121, 551 }			{ 1, 785 }	{ 1, 323 }	
Quantity not reported.....							
Turnbuckles, toggle bolts, etc.....	25	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	1, 311	( <sup>4</sup> )	( <sup>4</sup> )
Nonferrous bolts, nuts, rivets, washers, etc.	15	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	1, 578	( <sup>4</sup> )	( <sup>4</sup> )
Not reported by kind or by quantity.....	22				708		
Cut and wrought nails, spikes, and tacks, total <sup>7</sup>	30				4, 716	5, 060	7, 504
Cut nails and spikes.....	14	<i>M lb.</i> 29, 019	<i>M lb.</i> 45, 796	<i>M lb.</i>	{ 2, 037 }	{ 2, 267 }	
Cut tacks:							
Quantity reported.....	22	{ 17, 937 }			{ 1, 622 }	{ 2, 201 }	{ 6, 371 }
Quantity not reported.....							
Horseshoe nails.....	3	<i>Kegs, 100-lb.</i> 57, 915	<i>Kegs, 100-lb.</i> 43, 900	<i>Kegs, 100-lb.</i> 98, 750	597	502	1, 133
Galvanized plates, sheets, and strips, made for sale as such, total <sup>8</sup> .....	30	<i>Long tons</i> 674, 351	<i>Long tons</i> 706, 961	<i>Long tons</i> 1, 285, 947	44, 304	49, 811	103, 930
Plain.....	29	430, 809	444, 654	959, 524	28, 381	31, 430	77, 567
Corrugated or crimped.....	23	243, 542	262, 307	306, 423	15, 922	18, 381	26, 363
Corrugated or crimped sheets, not galvanized, made in rolling-mill industry.....	9	2, 338	3, 026	5, 285	140	175	380
Wrought pipe and tube, total <sup>9</sup> .....	114				120, 623	200, 225	455, 277
Wrought-welded, total.....	60				70, 056	133, 782	296, 094
Boiler tubes <sup>10</sup> .....	5	17, 344	16, 939	40, 628	1, 830	1, 920	4, 851
Oil-country casing, tubing, and pipe:							
Made in rolling-mill industry.....	8	69, 146	151, 640	888, 338	4, 488	9, 822	61, 708
Made in other industries.....	11	82, 228	434, 215	493, 330	6, 202	33, 172	39, 652
Other black pipe:							
Made in rolling-mill industry.....	18	293, 510	465, 115	948, 065	18, 354	32, 271	72, 068
Made in other industries.....	29	187, 111	265, 866	531, 289	13, 522	21, 079	45, 172
Galvanized pipe:							
Made in rolling-mill industry.....	11	174, 472	192, 723	402, 497	13, 562	18, 019	38, 769
Made in other industries.....	14	77, 365	116, 673	171, 929	6, 884	11, 552	19, 240
Mechanical tubing made in other industries:							
Quantity reported.....	13	31, 906	28, 627	77, 178	5, 214	4, 771	11, 487
Quantity not reported.....						575	3, 148
Heavy riveted and lock-joint <sup>11</sup> .....	44	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	1, 212	4, 023	10, 262
Seamless, made in rolling-mill industry, total.....	19	476, 185	721, 992	1, 328, 028	49, 355	62, 420	148, 630
Boiler tubes.....	11	62, 737	70, 784	185, 369	7, 083	8, 595	21, 723
Oil-country casing, tubing, and pipe.....	11	319, 343	568, 733	882, 732	26, 850	40, 387	81, 869
Other black pipe and galvanized pipe.....	8	18, 562	12, 788	31, 792	1, 691	1, 603	3, 629
Mechanical tubing.....	14	75, 543	69, 687	229, 085	13, 731	11, 836	42, 208

For footnotes, see end of table.

TABLE 4.—PRINCIPAL MANUFACTURES FROM ROLLING-MILL PRODUCTS OTHER THAN TIN PLATE AND TERNEPLATE AND WIRE AND WIRE PRODUCTS—PRODUCTION, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929—Continued

[See note at head of table]

KIND	Estab- lish- ments, 1933 <sup>1</sup>	QUANTITY			VALUE IN THOU- SANDS OF DOLLARS (SEE SEC. 25, P. 13)		
		1933 <sup>2</sup>	1931	1929	1933 <sup>2</sup>	1931	1929
Horse and mule shoes <sup>3</sup> .....	8	<i>Kegs,</i> 100-lb. 311,398	<i>Kegs,</i> 100-lb. 293,538	<i>Kegs,</i> 100-lb. 417,182	1,298	1,429	2,664
Horse and mule shoe calks.....	4	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	221	251	539
Cold-rolled strip steel, flat bright, except cold- rolled from drawn wire, total <sup>10</sup> .....	49	<i>Long</i> tons 405,221	<i>Long</i> tons 341,409	<i>Long</i> tons ( <sup>11</sup> )	35,410	34,017	( <sup>11</sup> )
Made in rolling-mill industry.....	19	250,306	200,002	( <sup>11</sup> )	20,211	19,113	( <sup>11</sup> )
Made in other industries.....	30	154,915	141,407	( <sup>11</sup> )	15,200	14,904	( <sup>11</sup> )
Widths 6 inches and narrower.....	46	212,599	166,071	348,480	21,446	19,155	39,537
Wider than 6 inches but under 12 inches.....	22	86,661	75,858	220,729	6,844	7,250	18,335
Widths 12 inches and over but less than 24 inches (not including motor-vehicle fender steel).....	17	67,976	49,909	( <sup>11</sup> )	4,846	4,182	( <sup>11</sup> )
Fender steel (for motor vehicles).....	7	37,985	49,671	101,196	2,274	3,430	6,967
Cold-finished steel bars, total.....	35	-----	-----	-----	26,027	24,833	71,756
Made in rolling-mill industry.....	11	106,333	93,826	271,727	6,977	7,090	22,783
Made in other industries.....	24	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	19,050	17,743	48,973
Rounds, 2 inches in diameter and smaller: Quantity reported.....	25	189,750	140,195	371,854	12,482	10,008	31,171
Quantity not reported.....	-----	-----	-----	-----	-----	-----	4,743
Rounds, more than 2 inches in diameter: Quantity reported.....	19	86,412	81,859	119,579	5,737	5,873	8,601
Quantity not reported.....	-----	-----	-----	-----	-----	-----	2,374
Cold-finished steel bars (rounds) not dis- tributed as to size: Quantity reported.....	6	11,556	34,827	-----	785	2,683	-----
Quantity not reported.....					835	098	5,072
Shapes (square, hexagonal, and flat): Quantity reported.....	21	84,506	72,608	237,298	6,188	5,572	18,515
Quantity not reported.....	-----	-----	-----	-----	-----	-----	1,281
Bearings and parts, ball and roller, total <sup>3</sup> .....	47	-----	-----	-----	40,530	50,528	120,034
Ball bearings and parts.....	31	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	21,154	28,310	66,881
Roller bearings and parts.....	23	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	19,377	22,219	53,153
Rolls for rolling mills, total.....	40	102,048	98,924	171,828	13,084	13,348	21,886
Steel <sup>3</sup> .....	17	26,807	32,464	45,752	4,481	5,413	6,853
Iron.....	30	75,241	66,460	126,074	8,603	7,935	14,533

<sup>1</sup> As some of the establishments in each group manufacture more than one class of products, the sum of the numbers manufacturing the individual classes of products is greater than the total shown for the group.

<sup>2</sup> In addition to the products covered by this table, steel works and rolling mills reported, for 1933, the manufacture, for sale, of the following commodities: Fabricated structural steel, 59,053 tons (2,240 pounds), valued at \$2,827,878; switches, frogs, and crossings, 21,413 tons, \$3,211,381; gray-iron castings, 157,288 tons, \$4,378,623; heat-corrosion-resistant castings, 1,363 tons, \$1,052,138; nonferrous-metal castings, \$402,981; pressed, stamped, and other shapes not advanced beyond pressing, 44,895 tons, \$2,763,878; machinery, \$3,488,734; miscellaneous products, including polished and planished sheets, steel springs, cast-iron car and locomotive wheels, malleable castings, chain, fence posts, stay bolts, fabricated sheet piling, etc., \$21,617,461. For production of tin plate and terneplate and of wire and wire products, including those made in departments operated in connection with steel works and rollings mills, see table on p. 481 and table 3, p. 485.

<sup>3</sup> Reported almost wholly by rolling-mill industry.

<sup>4</sup> Revised.

<sup>5</sup> The classification for 1933 was different from that for 1931 and 1929.

<sup>6</sup> No data.

<sup>7</sup> For production of wire nails, brads, and spikes, see table 3, p. 485.

<sup>8</sup> Not including couplings reported separately.

<sup>9</sup> Production in rolling-mill industry and in other industries given in combination only, to avoid disclosing data reported by individual establishments.

<sup>10</sup> For production of cold-rolled from drawn wire, see table 3, p. 485.

<sup>11</sup> No comparable data.

TABLE 5.—STEEL—PRODUCTION, BY QUANTITY AND BY PROCESS, FOR THE UNITED STATES: 1927 TO 1933

[Tons, 2,240 pounds]

PROCESS	1933	1931	1929	1927
Ingots and castings, total.....	1 23,162,713	25,895,640	56,160,683	44,756,716
Open-hearth, total.....	20,337,784	22,518,208	48,237,387	38,005,244
Basic.....	20,033,695	22,131,176	47,141,354	37,128,725
Acid.....	304,089	387,032	1,096,033	878,519
Bessemer.....	2,428,585	3,018,938	7,109,923	6,179,602
Electric or electrically refined.....	395,375	357,140	806,789	559,507
Crucible.....	969	1,354	6,584	12,363
Ingots, total.....	22,883,941	25,436,339	54,793,683	43,773,763
Open-hearth, total.....	20,151,878	22,200,675	47,196,242	37,258,560
Basic.....	19,961,197	22,009,391	46,617,671	36,777,647
Acid.....	190,681	191,284	578,571	480,913
Bessemer.....	2,426,266	3,011,394	7,096,275	6,153,703
Electric or electrically refined and crucible.....	305,797	224,270	501,166	361,500
Direct steel castings, total 2.....	278,772	459,301	1,367,000	982,953
Open-hearth, total.....	185,906	317,533	1,041,145	746,684
Basic.....	72,498	121,785	523,683	340,078
Acid.....	113,408	195,748	517,462	397,606
Bessemer.....	2,319	7,544	13,648	25,899
Electrical or electrically refined and crucible.....	90,547	134,224	312,207	210,370

1 Includes 441,047 tons of duplex steel.

2 For production of steel castings in other industries, see footnote 1, table 3.

TABLE 6.—STEEL—PRODUCTION FOR CONSUMPTION AND FOR SALE, BY PROCESS, FOR THE UNITED STATES: 1933

	Total tons (2,240 lbs.)	FOR CONSUMPTION BY PRODUCING COMPANY			For sale
		Total	In works where pro- duced	In other works of same company	
<b>TOTAL</b>					
1933.....	23,162,713	22,924,494	22,807,578	116,916	238,219
1931.....	25,895,640	25,492,523	25,281,747	210,776	403,117
1929.....	56,160,683	54,806,226	54,287,965	518,261	1,354,457
1927.....	44,756,716	43,804,792	43,431,590	373,202	961,924
<b>By Process, 1933</b>					
Open-hearth, total.....	20,337,784	20,187,361	20,083,780	103,581	150,423
Basic.....	20,033,695	19,954,494	19,870,012	84,482	79,201
Acid.....	304,089	282,867	213,768	19,099	71,222
Bessemer.....	2,428,585	2,423,875	2,418,041	5,834	4,710
Electric or electrically refined.....	395,375	313,258	305,787	7,501	83,086
Crucible.....	969				

TABLE 7.—WAGE EARNERS, BY MONTHS, FOR SELECTED STATES: 1933 AND 1931

[For average for the year, see table 1. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 26, p. 13]

	NUMBER REPORTED FOR—											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<i>United States</i>												
1933.....	216,184	220,341	<i>204,025</i>	218,871	239,084	270,477	310,840	334,033	337,307	336,590	316,754	317,658
1931.....	204,478	200,624	305,079	302,801	291,459	208,652	257,435	242,182	233,027	230,196	224,109	<i>223,665</i>
<i>States</i>												
Ala.:												
1933.....	5,709	6,279	5,878	5,777	5,917	6,205	7,572	7,305	8,057	8,299	8,230	8,882
1931.....	7,432	7,503	7,343	7,023	6,675	6,409	6,092	6,579	6,616	6,814	<i>6,941</i>	6,042
Calif.:												
1933.....	3,479	3,476	<i>3,464</i>	3,484	3,542	3,933	4,254	4,966	5,132	5,183	5,253	5,301
1931.....	5,141	5,046	5,021	5,027	4,850	4,440	4,356	4,273	4,153	4,006	3,916	3,882
Colo.:												
1933.....	2,065	2,656	2,692	2,666	2,093	<i>2,046</i>	2,471	2,559	2,558	2,492	2,523	2,160
1931.....	3,438	3,443	3,421	3,394	3,140	3,120	3,101	3,064	2,195	2,106	<i>1,566</i>	2,033
Conn.:												
1933.....	430	<i>425</i>	443	448	475	545	694	837	895	894	912	837
1931.....	684	586	589	589	529	542	474	537	548	532	493	<i>472</i>
Del.:												
1933.....	<i>420</i>	446	439	499	599	624	699	737	646	624	591	589
1931.....	742	734	727	721	702	624	682	668	626	624	620	<i>604</i>
Ill.:												
1933.....	12,045	12,461	<i>11,773</i>	13,517	14,771	17,105	20,969	21,888	21,295	20,650	18,438	19,053
1931.....	21,626	22,250	23,337	22,314	21,846	18,776	17,980	17,018	16,320	15,777	<i>16,533</i>	16,118
Ind.:												
1933.....	15,426	16,023	<i>13,673</i>	15,351	19,016	23,593	28,617	30,065	27,821	28,905	24,551	25,511
1931.....	21,948	22,327	<i>24,756</i>	22,731	21,198	18,575	17,859	16,617	14,871	14,701	14,369	<i>13,756</i>
Ky.:												
1933.....	2,893	2,942	<i>2,827</i>	2,921	3,240	3,627	4,123	4,677	4,738	4,720	4,151	4,067
1931.....	3,628	3,489	3,558	3,559	3,469	3,507	3,440	3,442	3,424	3,391	3,310	<i>3,295</i>
Md.:												
1933.....	6,913	<i>6,671</i>	6,762	6,726	7,376	8,938	10,826	11,506	11,990	11,388	11,861	11,790
1931.....	10,031	10,154	9,782	10,347	10,446	8,808	9,420	8,892	8,369	8,453	8,075	7,593
Mass.:												
1933.....	1,683	1,613	1,566	<i>1,547</i>	1,605	1,799	2,371	2,670	2,793	2,852	2,866	2,771
1931.....	2,221	2,220	2,239	2,177	2,101	2,077	2,007	1,965	1,875	1,895	<i>1,867</i>	1,890
Mich.:												
1933.....	4,199	4,171	<i>3,591</i>	4,408	4,694	5,530	6,001	6,426	6,983	6,897	6,841	6,914
1931.....	5,585	5,889	6,760	<i>7,265</i>	7,006	6,535	4,761	3,556	3,554	3,969	<i>3,284</i>	4,823
Minn.:												
1933.....	832	827	648	<i>554</i>	615	752	847	861	854	892	1,011	1,037
1931.....	1,770	1,706	1,684	1,634	1,586	1,473	1,468	1,419	<i>1,389</i>	1,397	1,398	1,390
Mo.:												
1933.....	1,812	1,858	1,887	1,878	1,954	2,027	2,040	2,287	2,139	2,171	<i>1,758</i>	1,932
1931.....	2,155	2,374	2,444	2,800	2,711	2,580	2,477	2,173	2,324	2,030	2,044	<i>1,987</i>
N. J.:												
1933.....	4,008	4,010	3,920	<i>3,792</i>	3,932	4,266	4,768	5,631	6,030	6,353	6,378	6,349
1931.....	5,981	5,934	5,792	<i>5,757</i>	5,585	5,517	5,551	5,384	<i>4,798</i>	5,308	5,072	5,308
N. Y.:												
1933.....	6,812	7,068	<i>6,563</i>	6,636	8,231	9,845	12,255	12,602	14,106	14,301	12,512	12,205
1931.....	10,736	11,173	11,428	11,226	11,600	10,600	9,642	9,598	9,383	8,883	<i>8,869</i>	8,963
Ohio:												
1933.....	50,253	51,457	<i>45,695</i>	51,150	56,301	62,971	71,066	78,041	79,861	79,489	72,784	72,393
1931.....	64,093	66,002	68,643	67,391	65,689	60,226	56,668	52,515	49,267	50,118	48,476	<i>48,073</i>
Oreg.:												
1933.....	<i>117</i>	134	139	179	178	148	158	167	211	243	229	240
1931.....	156	160	166	191	193	186	185	178	174	175	173	165
Pa.:												
1933.....	84,171	84,246	<i>79,070</i>	83,490	89,236	98,911	111,337	119,488	119,691	118,893	115,064	114,807
1931.....	110,565	111,562	113,349	112,003	105,782	98,468	94,862	89,324	89,635	86,349	85,223	82,967
Wash.:												
1933.....	349	305	<i>261</i>	364	298	365	447	487	457	438	467	467
1931.....	639	601	648	583	587	588	451	523	324	355	391	304
W. Va.:												
1933.....	<i>9,298</i>	10,085	9,577	10,179	11,501	13,416	15,341	16,461	16,548	16,329	15,870	15,688
1931.....	10,422	10,953	10,840	10,395	10,434	10,232	10,204	9,419	<i>8,416</i>	8,619	8,635	9,388
Wis.:												
1933.....	1,889	1,825	1,837	<i>1,818</i>	1,856	1,998	2,090	2,302	2,477	2,611	2,493	2,501
1931.....	3,179	3,281	3,519	3,522	3,382	3,190	3,076	2,880	2,863	2,635	2,636	<i>2,463</i>

## STOVES AND RANGES, HEATING APPARATUS, AND STEAM FITTINGS

[A preliminary report for these industries was issued on Oct. 13, 1934]

**Description of the industries.**—This report covers two industries; namely, (1) "Steam and hot-water heating apparatus and steam fittings" and (2) "Stoves and ranges (other than electric) and warm-air furnaces."

The "Steam and hot-water heating apparatus and steam fittings" industry embraces establishments engaged primarily in the manufacture of steam and hot-water heating boilers and radiators; coils, unions, flanges, and similar fittings; safety valves, vacuum gauges, thermostats and other heating regulators, and other classes of steam specialties; and mechanical stokers other than industrial.

The principal products of the "Stoves and ranges (other than electric) and warm-air furnaces" industry are stoves, ranges, heaters, and burners of all kinds (except those made for industrial use), including water-heating units complete with tanks, designed to consume coal, wood, gas, oil, alcohol, acetylene, and gasoline; flatirons heated with alcohol and other fuel burned internally; warm-air furnaces, auxiliary and ventilating heaters, and stove and furnace parts. (The manufacture of electric stoves, ranges, and other heating appliances is classified in the "Electrical machinery, apparatus, and supplies" industry.)

**Extent of coverage.**—The 1933 coverage of the establishments reporting in these industries for 1931 was practically complete. Of the 238 such establishments in the "Steam and hot-water heating apparatus and steam fittings" industry and the 589 in the "Stoves and ranges (other than electric) and warm-air furnaces" industry, 5 and 37, respectively, failed to supply any information in regard to their status (active, idle, etc.) or their activities in 1933, but these establishments accounted for only small fractions of 1 percent of the total number of wage earners and of the total value of products reported for the respective industries for 1931.

TABLE 1.—SUMMARY FOR THE INDUSTRIES, IN COMBINATION AND SEPARATELY, FOR THE UNITED STATES, 1927 TO 1933, AND FOR EACH INDUSTRY, BY STATES, 1933 AND 1931

[See sec. 26, p. 13]

	Num- ber of estab- lish- ments	Number of sal- aried employ- ees <sup>1</sup> <sup>2</sup>	Number of wage earners (average for the year)	Sal- aries <sup>1</sup>	Wages	Cost of materials, fuel, and purchased electric energy	Value of prod- ucts	Value added by man- ufacture <sup>3</sup>
Thousands of dollars. (See sec. 25, p. 13)								
THE GROUP AS A WHOLE								
<i>United States</i>								
1933.....	770	8,481	52,494	13,844	46,510	66,344	186,971	120,626
1931.....	827	( <sup>1</sup> )	61,576	( <sup>1</sup> )	64,833	91,537	271,607	180,070
1929.....	849	14,330	86,237	38,473	124,121	173,455	500,057	326,602
1927.....	796	14,776	88,073	38,144	129,179	169,931	488,444	313,513
STEAM AND HOT-WATER HEATING APPARATUS AND STEAM FITTINGS								
<i>United States</i>								
1933.....	227	3,473	22,301	6,152	19,541	20,061	69,234	49,173
1931.....	238	( <sup>1</sup> )	28,996	( <sup>1</sup> )	29,558	29,704	102,501	72,797
1929.....	240	6,299	39,621	16,527	53,975	72,708	228,810	155,602
1927.....	232	6,668	42,893	17,012	64,851	76,885	225,158	148,323
<i>States</i>								
<i>California:</i>								
1933.....	7	20	175	37	135	177	476	299
1931.....	8	( <sup>1</sup> )	163	( <sup>1</sup> )	170	213	666	453
<i>Connecticut:</i>								
1933.....	11	273	1,344	399	1,161	1,155	3,592	2,437
1931.....	9	( <sup>1</sup> )	2,213	( <sup>1</sup> )	2,360	1,771	6,821	5,050
<i>Illinois:</i>								
1933.....	36	1,045	6,511	1,965	6,562	5,279	19,982	14,703
1931.....	32	( <sup>1</sup> )	8,058	( <sup>1</sup> )	8,054	6,188	25,544	19,386
<i>Indiana:</i>								
1933.....	9	71	471	140	284	372	1,127	756
1931.....	10	( <sup>1</sup> )	854	( <sup>1</sup> )	764	966	3,661	2,695
<i>Massachusetts:</i>								
1933.....	24	283	1,113	432	1,107	929	3,517	2,588
1931.....	24	( <sup>1</sup> )	1,738	( <sup>1</sup> )	1,920	1,605	5,820	4,216
<i>Michigan:</i>								
1933.....	17	180	1,221	329	1,033	1,326	4,113	2,787
1931.....	16	( <sup>1</sup> )	1,235	( <sup>1</sup> )	1,191	1,469	4,935	3,466
<i>Missouri:</i>								
1933.....	3	9	28	16	26	35	79	43
1931.....	6	( <sup>1</sup> )	82	( <sup>1</sup> )	115	212	433	221
<i>New Jersey:</i>								
1933.....	9	130	1,190	221	1,019	1,514	4,154	2,640
1931.....	11	( <sup>1</sup> )	1,580	( <sup>1</sup> )	2,009	2,469	7,802	5,334
<i>New York:</i>								
1933.....	27	239	2,597	578	2,322	2,813	8,674	5,862
1931.....	37	( <sup>1</sup> )	3,420	( <sup>1</sup> )	3,546	3,965	11,852	7,987
<i>Ohio:</i>								
1933.....	20	439	2,199	744	1,695	1,631	6,460	4,828
1931.....	21	( <sup>1</sup> )	2,900	( <sup>1</sup> )	2,887	3,477	10,176	6,699
<i>Pennsylvania:</i>								
1933.....	35	423	3,574	650	2,609	2,768	8,355	5,587
1931.....	35	( <sup>1</sup> )	4,279	( <sup>1</sup> )	4,075	4,184	14,236	10,052
<i>Rhode Island:</i>								
1933.....	4	22	90	51	67	177	380	202
1931.....	4	( <sup>1</sup> )	124	( <sup>1</sup> )	126	246	696	450
<i>Wisconsin:</i>								
1933.....	5	124	576	163	337	495	1,615	1,120
1931.....	5	( <sup>1</sup> )	711	( <sup>1</sup> )	763	1,324	3,185	1,861
<i>Other States: <sup>4</sup></i>								
1933.....	20	215	1,213	427	1,183	1,390	6,711	5,321
1931.....	20	( <sup>1</sup> )	1,639	( <sup>1</sup> )	1,578	1,746	6,672	4,926

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE INDUSTRIES, IN COMBINATION AND SEPARATELY, FOR THE UNITED STATES, 1927 TO 1933, AND FOR EACH INDUSTRY, BY STATES, 1933 AND 1931—Continued

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
Thousands of dollars. (See sec. 25, p. 13)								
<b>STOVES AND RANGES (OTHER THAN ELECTRIC) AND WARM-AIR FURNACES</b>								
<i>United States</i>								
1933.....	543	5,008	30,193	7,691	26,969	46,284	117,737	71,453
1931.....	589	( <sup>4</sup> )	32,580	( <sup>4</sup> )	35,275	61,833	169,100	107,273
1929.....	609	8,031	46,616	21,946	65,147	100,747	271,747	171,000
1927.....	564	8,108	45,180	21,132	64,327	93,066	258,286	165,190
<i>States</i>								
Alabama:								
1933.....	8	62	840	86	519	697	1,993	1,296
1931.....	8	( <sup>4</sup> )	806	( <sup>4</sup> )	574	742	2,232	1,490
California:								
1933.....	51	266	1,466	428	1,508	2,548	6,002	3,454
1931.....	56	( <sup>4</sup> )	1,374	( <sup>4</sup> )	1,797	3,525	8,882	5,358
Colorado:								
1933.....	4	12	19	13	28	77	202	125
Connecticut:								
1933.....	10	215	291	404	311	960	2,415	1,454
1931.....	6	( <sup>4</sup> )	214	( <sup>4</sup> )	373	1,179	2,894	1,715
Georgia:								
1933.....	5	26	498	38	381	404	1,368	964
1931.....	6	( <sup>4</sup> )	455	( <sup>4</sup> )	330	267	1,183	916
Illinois:								
1933.....	62	714	4,108	1,237	3,762	6,786	16,779	9,993
1931.....	79	( <sup>4</sup> )	4,806	( <sup>4</sup> )	5,252	9,839	25,311	15,472
Indiana:								
1933.....	22	142	876	179	771	1,204	2,765	1,561
1931.....	22	( <sup>4</sup> )	830	( <sup>4</sup> )	909	1,659	3,832	2,173
Iowa:								
1933.....	14	78	221	120	193	430	1,324	894
1931.....	14	( <sup>4</sup> )	367	( <sup>4</sup> )	425	708	3,290	2,582
Kentucky:								
1933.....	3	54	255	62	183	243	623	380
1931.....	4	( <sup>4</sup> )	197	( <sup>4</sup> )	190	322	969	647
Maine:								
1933.....	3	8	124	11	131	187	406	219
1931.....	4	( <sup>4</sup> )	123	( <sup>4</sup> )	147	151	431	280
Maryland:								
1933.....	7	98	456	101	364	881	1,824	943
1931.....	6	( <sup>4</sup> )	413	( <sup>4</sup> )	445	830	1,913	1,083
Massachusetts:								
1933.....	39	281	2,024	412	2,128	3,082	8,213	5,131
1931.....	26	( <sup>4</sup> )	1,895	( <sup>4</sup> )	2,295	3,057	9,206	6,150
Michigan:								
1933.....	26	539	2,967	694	2,983	5,974	15,418	9,444
1931.....	32	( <sup>4</sup> )	3,089	( <sup>4</sup> )	3,724	7,173	22,731	15,558
Minnesota:								
1933.....	12	100	442	171	348	753	1,705	952
1931.....	14	( <sup>4</sup> )	462	( <sup>4</sup> )	556	1,260	2,749	1,490
Missouri:								
1933.....	21	200	1,091	297	844	1,885	4,967	3,082
1931.....	23	( <sup>4</sup> )	1,359	( <sup>4</sup> )	1,447	3,268	9,390	6,122
New Jersey:								
1933.....	15	71	444	116	445	737	1,767	1,030
1931.....	18	( <sup>4</sup> )	643	( <sup>4</sup> )	827	1,542	4,263	2,721
New York:								
1933.....	38	166	816	237	828	1,587	3,634	2,047
1931.....	42	( <sup>4</sup> )	1,293	( <sup>4</sup> )	1,518	2,154	5,883	3,728
Ohio:								
1933.....	64	1,077	5,913	1,672	5,160	7,703	20,503	12,800
1931.....	84	( <sup>4</sup> )	6,711	( <sup>4</sup> )	6,666	11,726	29,130	17,404
Pennsylvania:								
1933.....	52	372	2,664	629	2,596	4,962	12,229	7,266
1931.....	59	( <sup>4</sup> )	3,287	( <sup>4</sup> )	3,986	6,644	18,379	11,735

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE INDUSTRIES, IN COMBINATION AND SEPARATELY, FOR THE UNITED STATES, 1927 TO 1933, AND FOR EACH INDUSTRY, BY STATES, 1933 AND 1931—Continued

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
	Thousands of dollars. (See sec. 25, p. 13)							
STOVES AND RANGES, ETC.—continued								
States—Continued								
Rhode Island:								
1933.....	7	8	37	22	39	145	350	205
1931.....	4	( <sup>4</sup> )	38	( <sup>4</sup> )	55	129	407	277
Tennessee:								
1933.....	15	135	2,415	193	1,575	2,306	6,084	3,688
1931.....	16	( <sup>4</sup> )	2,003	( <sup>4</sup> )	1,467	2,317	6,193	3,876
Virginia:								
1933 <sup>5</sup> .....	4	18	121	18	89	111	353	242
Washington:								
1933.....	13	33	211	73	205	288	780	492
1931.....	16	( <sup>4</sup> )	232	( <sup>4</sup> )	249	395	1,081	686
West Virginia:								
1933.....	3	11	85	19	75	60	215	154
1931.....	4	( <sup>4</sup> )	118	( <sup>4</sup> )	111	110	282	172
Wisconsin:								
1933.....	19	253	1,521	338	1,212	1,837	4,578	2,741
1931.....	15	( <sup>4</sup> )	1,389	( <sup>4</sup> )	1,416	2,247	6,628	4,380
Other States: <sup>7</sup>								
1933.....	17	60	289	62	290	346	1,242	896
1931.....	31	( <sup>4</sup> )	476	( <sup>4</sup> )	516	589	1,847	1,257

<sup>1</sup> Not including proprietors and firm members, as follows: "Steam and hot-water heating apparatus and steam fittings" industry—1933, 26; 1931, no data; 1929, 25; 1927, 38. "Stoves and ranges (other than electric) and warm-air furnaces" industry—1933, 104; 1931, no data; 1929, 166; 1927, 171.

<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.

<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.

<sup>4</sup> No data.

<sup>5</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Ala., 1, 2; Fla., 2, 3; Iowa, 3, 2; Md., 1, 2; Minn., 6, 6; N. H., 1, 1; Oreg., 1, 1; Tenn., 1, 1; Utah, 2, 0; Va., 0, 1; Wash., 2, 1.

<sup>6</sup> Figures for 1931 withheld to avoid disclosing approximations of data for individual establishments; included in items for "Other States."

<sup>7</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Ark., 1, 1; Colo. (1931), 4; Del., 1, 0; Kans., 3, 3; La., 0, 1; Nebr., 1, 1; N. H., 1, 0; N. C., 1, 1; Okla., 1, 2; Oreg., 5, 11; S. C., 1, 0; Tex. 2, 4; Va. (1931), 3.

TABLE 2.—PRODUCTS, BY KIND, NUMBER, AND VALUE, 1933 AND 1931, AND BY KIND AND NUMBER, 1929, FOR THE UNITED STATES

	1933	1931 Comparable with 1933 <sup>1</sup>	1931 As published
1. "Steam and hot-water heating apparatus and steam fittings" and "Stoves and ranges (other than electric) and warm-air furnaces" industries, all products, total value.....	\$186,970,776	-----	\$271,607,011
2. Heating and cooking apparatus (other than electric), steam fittings, and valves and specialties.....	167,281,542	\$230,066,813	255,537,217
3. Other products (not normally belonging to the industries), value, and receipts for repair work.....	11,493,198	13,545,327	16,069,794
4. Heating and cooking apparatus (other than electric), steam fittings, etc., and other products, not reported separately (on abbreviated schedule) <sup>2</sup> .....	8,196,036	-----	-----
5. Heating and cooking apparatus (other than electric) made as secondary products in other industries.....	12,815,502	9,662,377	15,534,468
Steam and hot-water heating apparatus, stoves and ranges (other than electric), steam fittings, and valves and specialties, aggregate value (2 and 5).....	180,097,044	239,729,190	271,071,685

For footnotes, see end of table.



TABLE 2.—PRODUCTS, BY KIND, NUMBER, AND VALUE, 1933 AND 1931, AND BY KIND AND NUMBER, 1929, FOR THE UNITED STATES—Continued

	NUMBER				VALUE IN THOU- SANDS OF DOLLARS <sup>1</sup>	
	1933 Report- ed on stand- ard sched- ule <sup>2</sup>	1931 Com- parable with 1933 <sup>1</sup>	1931 As pub- lished; compara- ble with 1929	1929	1933 Report- ed on stand- ard sched- ule <sup>2</sup>	1931 Com- parable with 1933 <sup>1</sup>
Steam and hot-water heating apparatus, stoves and ranges (other than electric), steam fittings, valves, and specialties, aggregate value.....					180, 097	230, 729
Steam and hot-water heating apparatus, total.....					20, 352	32, 184
Steam and hot-water heating boilers and parts, total.....					12, 371	18, 453
Cast-iron steam and hot-water heating boilers:						
Number reported.....	59, 090	96, 937	99, 424	( <sup>4</sup> )	5, 568	8, 052
Number not reported.....					3, 925	5, 030
Steel steam and hot-water heating boilers.....	5, 001	15, 371	16, 864	( <sup>4</sup> )	997	3, 212
Parts for heating boilers.....					1, 881	1, 160
Radiators, total.....					7, 981	13, 731
Cast-iron, except gas-fired.....					7, 671	12, 617
Copper, except gas-fired.....					144	929
Gas-fired.....					166	185
Warm-air furnaces, parts, and registers, total.....					9, 439	20, 301
Warm-air furnaces, total.....					7, 341	15, 018
Number reported.....	101, 508	177, 669	207, 375	378, 546	6, 334	15, 018
Number not reported.....					1, 007	
Parts and registers.....					2, 098	5, 373
Unit heaters, total.....					2, 602	4, 165
Number reported.....	12, 689	15, 277	20, 255	48, 491	1, 280	2, 616
Number not reported.....					1, 322	1, 540
Stoves, ranges, water heaters, and parts, total.....					78, 173	97, 529
Coal and wood, total.....					26, 790	28, 996
Coal and wood cooking stoves and ranges, total.....					15, 837	16, 704
Porcelain-enameled.....	234, 384	196, 591	211, 701	353, 741	10, 669	12, 152
Other than porcelain-enam- eled, total.....					5, 138	4, 552
Number reported.....	318, 115	186, 620	203, 633	324, 296	4, 862	4, 552
Number not reported.....					306	
Not separately reported as to finish.....				61, 486		
Coal and wood heating stoves, total.....					7, 625	9, 837
Porcelain-enameled.....	194, 626	258, 542	270, 074	425, 506	4, 176	6, 943
Other than porcelain-enam- eled.....	306, 332	217, 666	230, 084	415, 455	2, 642	2, 531
Not separately reported as to finish.....				45, 760		
Sheet metal (air-tight, etc.), total.....				( <sup>5</sup> )	807	364
Number reported.....	414, 717	152, 600	167, 516		675	272
Number not reported.....					132	92

For footnotes, see end of table.

TABLE 2.—PRODUCTS, BY KIND, NUMBER, AND VALUE, 1933 AND 1931, AND BY KIND AND NUMBER, 1929, FOR THE UNITED STATES—Continued

	NUMBER				VALUE IN THOU- SANDS OF DOLLARS <sup>3</sup>	
	1933 Reported on stand- ard sched- ule <sup>2</sup>	1931 Com- parable with 1933 <sup>1</sup>	1931 As pub- lished; compa- rable with 1929	1929	1933 Reported on standard sched- ule <sup>2</sup>	1931 Com- parable with 1933 <sup>1</sup>
Steam and hot-water heating apparatus, etc.—Continued.						
Stoves, ranges, etc.—Continued.						
Coal and wood—Continued.						
Coal and wood water heaters (domestic supply), total.....	(4)	149,398	160,455	-----	1,540	1,036
With storage tanks at- tached:						
Number reported.....	12,179	(5)	(5)	(5)	296	(5)
Number not reported.....	-----				26	
Without storage tanks:						
Number reported.....	141,500				920	
Number not reported.....	-----				289	
Parts for coal and wood stoves, ranges, and water heaters.....	-----	-----	-----	-----	1,788	1,419
Gas, total.....	-----	-----	-----	-----	33,278	51,149
Gas cooking stoves and ranges, total.....	-----	-----	-----	-----	24,356	34,780
With ovens:						
Porcelain-enameled.....	677,931	763,389 172,554	801,185 201,009	1,304,472 297,955	23,094	29,962
Other than porcelain- enameled.....	25,701				874	
Without ovens.....	15,660	-----	-----	(6)	388	4,818
Gas hot plates, total.....	-----	-----	-----	-----	278	508
Number reported.....	75,315	156,900	167,442	-----	188	508
Number not reported.....	-----	-----	-----	(4)	91	-----
Gas room heaters, total.....	-----	-----	-----	-----	2,267	3,684
Number reported.....	253,177	364,178	446,996	-----	1,938	3,684
Number not reported.....	-----	-----	-----	-----	279	-----
Gas water heaters (domestic supply), total.....	(4)	551,816	637,783	894,785	5,002	10,158
With storage tanks attached:						
Number reported.....	120,623	(5)	(5)	(5)	3,435	(5)
Number not reported.....	-----				244	
Without storage tanks.....	291,999	-----	-----	-----	1,273	-----
Parts for gas stoves, ranges, and water heaters.....	-----	-----	-----	-----	1,374	2,019
Kerosene and fuel-oil, total.....	-----	-----	-----	-----	11,448	11,143
Kerosene cooking stoves and ranges, total.....	627,557	460,706	486,842	758,530	6,615	6,995
Porcelain-enameled.....	36,412	141,816	158,952	262,152	896	2,527
Other than porcelain-en- ameled.....	591,145	327,890	327,890	496,378	5,720	4,468
Kerosene room heaters, total.....	160,040	134,111	108,407	196,060	2,064	1,133
Circulating or radiant type.....	63,651	(5)	(5)	(5)	1,525	(5)
Other types (wick, etc.).....	105,389	(5)	(5)	(5)	559	(5)
Kerosene water heaters (domes- tic supply).....	28,745	11,619	12,086	26,582	352	195
Parts for kerosene cooking stoves, ranges, and heaters.....	-----	-----	-----	-----	2,397	2,821

For footnotes, see end of table.

TABLE 2.—PRODUCTS, BY KIND, NUMBER, AND VALUE, 1933 AND 1931, AND BY KIND AND NUMBER, 1929, FOR THE UNITED STATES—Continued

	NUMBER				VALUE IN THOUSANDS OF DOLLARS <sup>1</sup>	
	1933 Reported on standard schedule <sup>2</sup>	1931 Comparable with 1933 <sup>1</sup>	1931 As published; comparable with 1929	1929	1933 Reported on standard schedule <sup>2</sup>	1931 Comparable with 1933 <sup>1</sup>
Steam and hot-water heating apparatus, etc.—Continued.						
Stoves, ranges, etc.—Continued.						
Gasoline, total.....					2,037	3,078
Gasoline cooking stoves and ranges, total.....					1,303	1,634
Porcelain-enameled:						
Number reported.....	31,645	33,688	33,688	(4)	687	1,064
Number not reported.....					360	345
Other than porcelain-enameled.....	21,702	11,875	12,500	16,462	285	225
Gasoline water heaters (domestic supply).....	9,912	1,441	1,535	2,137	85	19
Gasoline camp stoves:						
Number reported.....	107,989	86,675	86,675	130,501	293	281
Number not reported.....					60	97
Parts for gasoline cooking stoves, ranges, and heaters.....					296	1,046
Combination (coal, wood, and gas) cooking stoves and ranges, total.....	51,109	22,738	29,613		3,289	1,762
Porcelain-enameled.....	43,233	20,890	27,341	(5)	3,161	1,607
Other than porcelain-enameled.....	2,876	1,848	2,272	(5)	128	146
Other stoves, ranges, and water heaters and those not specifically reported.....					741	1,410
Laundry, orchard, etc.....					110	206
Other.....					631	1,204
Other heating and cooking apparatus and supplies:						
Oil burners, total.....					18,037	17,378
Domestic (for central heating systems and water heating), total.....					12,048	13,724
Mechanical or forced draft:						
Number reported.....	70,658	77,882	86,011		11,610	13,558
Number not reported.....				101,950	370	
Atmospheric (natural) draft.....	951	2,325	2,747		68	167
Commercial—mechanical or forced draft.....	1,778	(5)	(5)	(5)	336	(5)
Distillate oil burners for cooking and heating stoves:						
Number reported.....	217,970	102,524	108,759	(5)	3,592	2,587
Number not reported.....					836	254
Oil burners, kind not specified.....						812
Fuel-oil boiler-burner units (complete with boilers or furnaces), total.....		(5)	(5)	(5)	1,226	(5)
Number reported.....	1,350				357	
Number not reported.....					899	
Gas burners, total.....					830	818
Domestic and commercial types.....					375	
Gas boiler-burner units (complete with boilers or furnaces), total.....		(5)	(5)	(5)	456	(5)
Number reported.....	1,822				364	
Number not reported.....					91	

For footnotes, see end of table.

TABLE 2.—PRODUCTS, BY KIND, NUMBER, AND VALUE, 1933 AND 1931, AND BY KIND AND NUMBER, 1929, FOR THE UNITED STATES—Continued

	NUMBER				VALUE IN THOUSANDS OF DOLLARS <sup>1</sup>	
	1933 Reported on standard schedule <sup>2</sup>	1931 Comparable with 1933 <sup>3</sup>	1931 As published; comparable with 1929	1929	1933 Reported on standard schedule <sup>2</sup>	1931 Comparable with 1933 <sup>3</sup>
Steam and hot-water heating apparatus, etc.—Continued.						
Other heating and cooking apparatus and supplies—Continued.						
Parts for oil burners and gas burners, made for sale as such.....					831	871
Stokers, total.....					1,861	
Domestic type:						
Number reported.....	6,824	4,913	4,997	7,031	1,160	997
Number not reported.....					114	
Commercial type.....	181	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	87	( <sup>4</sup> )
Incinerators.....					61	314
Portable ovens (detachable ovens for use on oil, gasoline, and other stoves).....	453,143	314,059	331,400	734,850	507	804
Steam tables, except electric.....					298	178
Other cafeteria, hotel, and kitchen apparatus.....					1,753	3,079
Heating and cooking equipment, not reported by kind.....					1,816	1,436
Fittings, valves, and specialties, total value.....					40,544	54,659
Fittings, total.....					7 11,687	7 13,169
Brass and bronze.....					1,637	1,037
Cast-iron.....					3,277	4,641
Malleable-iron.....					5,598	6,105
Steel (cast and forged).....					857	1,374
Other metals.....					348	12
Faucets and spigots.....					7 430	7 1,513
Valves, total.....					7 17,185	7 19,954
Brass and bronze.....					8,816	9,490
Other.....					8,370	10,456
Specialties, total.....					11,241	20,023
Thermostats, total.....				( <sup>5</sup> )	8,704	8,500
Number reported.....	553,683	801,418	1,169,800		4,969	5,366
Number not reported.....					3,830	3,134
Other specialties.....					2,448	11,523
Air conditioners (including humidifiers).....					2,009	1,886
Incubators and brooders.....					2,074	3,540

<sup>1</sup> See sec. 5c, p. 4. The figures given in this column represent the production, in 1931, of those classes of establishments (not in all cases the same individual establishments) which reported on the standard schedule for 1933.

<sup>2</sup> See sec. 5c, p. 4.

<sup>3</sup> See sec. 25, p. 13.

<sup>4</sup> Data incomplete.

<sup>5</sup> Not reported separately.

<sup>6</sup> No data.

<sup>7</sup> Values of fittings, faucets and spigots, and valves made by establishments engaged primarily in the manufacture of steam and hot-water heating apparatus and stoves and ranges. For total values of fittings, etc., regardless of industry classifications, see report for "Foundry and machine-shop products not elsewhere classified", table 4, p. 556.

<sup>8</sup> No comparable data.

TABLE 3.—WAGE EARNERS, BY QUARTERS, FOR SELECTED STATES: 1933 AND 1931

[The average for the year (table 1) differs from the average of the quarterly figures below. (See fourth sentence, sec. 13, p. 8.) See sec. 26, p. 13]

	1933 <sup>1</sup>				1931			
	March	June	Sept.	Dec.	March	June	Sept.	Dec.
<b>STEAM AND HOT-WATER HEATING APPARATUS AND STEAM FITTINGS</b>								
United States.....	17,982	21,218	27,145	24,337	31,117	28,720	27,630	26,039
<i>States</i>								
California.....	104	125	207	213	165	141	172	158
Connecticut.....	1,242	1,278	1,423	1,436	2,362	2,112	2,049	2,098
Illinois.....	6,384	6,269	7,744	7,363	9,355	8,146	7,121	6,829
Indiana.....	351	387	570	533	864	890	942	676
Iowa.....	68	95	141	133	(2)	(2)	(2)	(2)
Massachusetts.....	782	898	1,396	1,351	1,814	1,750	1,667	1,646
Michigan.....	776	1,260	1,563	1,164	1,296	1,125	1,252	1,265
Minnesota.....	435	683	1,302	836	717	801	849	595
Missouri.....	8	34	43	28	99	76	91	84
New Jersey.....	1,333	1,395	1,566	607	1,606	1,536	1,520	1,390
New York.....	2,013	2,484	3,367	2,871	3,450	3,410	3,365	3,233
Ohio.....	1,669	2,080	2,526	2,544	2,989	2,937	2,845	2,502
Pennsylvania.....	2,885	3,256	4,231	4,239	4,486	4,158	4,081	4,060
Rhode Island.....	97	93	94	91	131	129	126	110
Wisconsin.....	555	564	626	518	699	699	735	710
<b>STOVES AND RANGES (OTHER THAN ELECTRIC) AND WARM-AIR FURNACES</b>								
United States.....	22,427	28,608	39,497	32,454	34,263	32,919	34,988	27,626
<i>States</i>								
Alabama.....	612	812	1,087	921	827	837	851	687
California.....	1,074	1,264	1,875	1,705	1,279	1,291	1,475	1,429
Colorado.....	15	13	23	24	43	9	24	37
Connecticut.....	198	215	526	277	169	181	307	241
Georgia.....	421	484	585	561	457	453	468	442
Illinois.....	2,901	3,941	5,746	3,901	4,909	5,258	5,412	3,492
Indiana.....	748	814	1,122	920	888	786	991	653
Iowa.....	147	245	347	148	389	317	434	272
Kansas.....	48	31	105	135	147	141	153	144
Kentucky.....	147	222	416	292	169	172	257	153
Maine.....	107	115	142	139	127	127	110	117
Maryland.....	383	489	514	389	406	447	481	374
Massachusetts.....	1,448	1,879	2,767	2,324	1,972	1,915	2,099	1,967
Michigan.....	2,201	2,748	4,025	2,947	3,770	3,135	3,158	2,576
Minnesota.....	326	404	613	517	499	495	443	407
Missouri.....	915	981	1,241	1,335	1,409	1,259	1,600	1,132
New Jersey.....	418	372	511	512	646	670	652	614
New York.....	622	822	996	869	1,403	1,369	1,297	1,071
Ohio.....	4,068	5,518	8,006	6,523	6,952	6,633	6,981	5,648
Oregon.....	125	137	167	138	165	169	205	180
Pennsylvania.....	2,173	2,543	3,154	2,912	3,336	3,357	3,362	3,105
Rhode Island.....	31	34	47	30	35	35	45	45
Tennessee.....	1,730	2,637	3,023	2,832	2,169	1,994	2,234	1,240
Virginia.....	74	81	176	174	63	68	97	51
Washington.....	127	198	272	238	224	236	277	207
West Virginia.....	69	73	94	92	115	116	118	116
Wisconsin.....	1,242	1,563	1,814	1,502	1,623	1,388	1,353	1,162

<sup>1</sup> See secs. 5 p. 4, and 13, p. 8. The establishments canvassed with the standard schedule reported wage earners, by months, as follows:

<i>Steam and hot-water heating apparatus, etc.</i> —Number of establishments reported on standard schedule, 140-			
January.....	18,488	May.....	18,729
February.....	18,465	June.....	20,155
March.....	17,192	July.....	21,751
April.....	17,746	August.....	24,702
<i>Stoves and ranges, etc.</i> —Number of establishments reported on standard schedule, 385.			
January.....	20,047	May.....	24,602
February.....	21,680	June.....	27,492
March.....	21,421	July.....	29,666
April.....	23,003	August.....	33,725
		September.....	37,839
		October.....	39,838
		November.....	36,349
		December.....	31,027

<sup>2</sup> Withheld to avoid disclosing data for individual establishments.

## TIN CANS AND OTHER TINWARE NOT ELSEWHERE CLASSIFIED

[A preliminary report for this industry was issued on May 31, 1934]

**Description of the industry.**—The "Tin cans and other tinware not elsewhere classified" industry embraces establishments engaged primarily in the manufacture, from purchased tin plate, of venthole-top, sanitary, and general-line cans and packages; ice-cream and milk cans; and pails, boxes, and other tinware, except stamped ware. Tin-can departments operated by establishments which manufacture tin cans for use as containers for their own products are also included. (Establishments whose principal product is stamped tinware are classified in the "Stamped ware, enameled ware, and metal stampings; enameling, japanning, and lacquering" industry.)

**Extent of coverage.**—The 1933 coverage of the establishments reporting in this industry was nearly complete. Only six establishments failed to supply any information in regard to their status (active, idle, etc.) or their activities in 1933, and these establishments accounted for less than one-half of 1 percent of the 1931 employment and production totals for the industry.

# CENSUS OF MANUFACTURES: 1933

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1927 TO 1933 AND FOR STATES, 1933 AND 1931

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
	Thousands of dollars. (See sec. 25, p. 13)							
TIN CANS AND OTHER TINWARE NOT ELSEWHERE CLASSIFIED								
United States								
1933.....	194	2,540	23,343	4,911	22,693	137,046	207,946	70,900
1931.....	199	( <sup>4</sup> )	25,271	( <sup>4</sup> )	27,978	149,121	223,634	74,513
1929.....	232	3,757	31,497	8,288	38,173	194,987	296,901	101,915
1927.....	236	3,335	29,721	7,399	35,001	169,421	253,479	84,057
States								
California:								
1933.....	20	235	2,166	491	2,216	21,309	31,949	10,640
1931.....	21	( <sup>4</sup> )	2,292	( <sup>4</sup> )	2,648	20,307	30,173	9,866
Illinois:								
1933.....	29	456	4,862	904	5,152	29,637	45,472	15,835
1931.....	31	( <sup>4</sup> )	5,041	( <sup>4</sup> )	6,061	34,831	52,692	17,861
Maryland:								
1933.....	15	359	3,181	711	2,955	14,372	21,400	7,028
1931.....	15	( <sup>4</sup> )	3,707	( <sup>4</sup> )	3,692	16,913	25,127	8,214
Massachusetts:								
1933.....	8	82	492	137	518	1,384	2,580	1,196
1931.....	8	( <sup>4</sup> )	509	( <sup>4</sup> )	576	1,672	3,033	1,361
Missouri:								
1933.....	7	81	770	155	612	2,110	3,808	1,698
1931.....	7	( <sup>4</sup> )	884	( <sup>4</sup> )	890	3,071	5,093	2,022
New Jersey:								
1933.....	9	204	1,595	363	1,823	9,612	14,695	5,082
1931.....	8	( <sup>4</sup> )	1,736	( <sup>4</sup> )	2,021	9,550	15,381	5,832
New York:								
1933.....	31	292	2,936	553	2,928	12,264	20,544	8,280
1931.....	32	( <sup>4</sup> )	3,092	( <sup>4</sup> )	3,708	12,756	20,257	7,501
Ohio:								
1933.....	13	163	1,703	363	1,567	7,138	11,498	4,360
1931.....	16	( <sup>4</sup> )	2,017	( <sup>4</sup> )	2,234	9,557	14,423	4,866
Pennsylvania:								
1933.....	14	149	1,493	298	1,267	9,484	12,842	3,353
1931.....	14	( <sup>4</sup> )	1,594	( <sup>4</sup> )	1,508	8,952	12,737	3,785
Texas:								
1933.....	4	58	450	124	327	1,187	1,698	512
1931.....	4	( <sup>4</sup> )	443	( <sup>4</sup> )	399	1,677	2,555	878
Wisconsin:								
1933.....	4	8	183	24	171	2,364	2,709	346
Other States: <sup>5</sup>								
1933.....	40	453	3,513	789	3,150	26,185	38,751	12,556
1931.....	43	( <sup>4</sup> )	3,956	( <sup>4</sup> )	4,241	29,835	42,163	12,328

<sup>1</sup> Not including proprietors and firm members, as follows: 1933, 13; 1931, no data; 1929, 58; 1927, 62.

<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929 and 1927, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.

<sup>3</sup> Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.

<sup>4</sup> No data.

<sup>5</sup> Figures for 1931 withheld to avoid disclosing data for individual establishments; included in items for "Other States."

<sup>6</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Colo., 1; Fla., 1; Ga., 2; Ind., 3; Ky., 1; La., 4; Maine, 3; Mich., 3; Minn., 3; Nebr., 1; Oreg., 2; R. I., 1; Tenn., 3; Utah, 1; Va., 3; Wash., 4; W. Va., 3; Wis. (1931), 3.

TABLE 2.—TIN CANS AND OTHER TINWARE—PRODUCTION, BY KIND, NUMBER, AND VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929

	NUMBER IN THOUSANDS <sup>1</sup>			VALUE IN THOUSANDS OF DOLLARS <sup>2</sup>		
	1933	1931	1929	1933	1931	1929
1. "Tin cans and other tinware not elsewhere classified" industry, all products, total value.....				207,946	223,634	296,901
2. Tin cans, utensils, etc.....				205,392	221,066	279,963
3. Other products (not normally belonging to the industry).....				2,555	2,568	16,939
4. Tin cans, utensils, etc., made as secondary products in other industries, value.....				2,087	3,227	3,847
Tin cans, utensils, etc., aggregate value (2 and 4).....				207,479	224,293	283,810
Venthole-top cans (chiefly for evaporated milk).....	1,736,937	1,446,442	1,711,692	14,721	14,455	20,734
Sanitary cans, including sweetened-condensed-milk cans.....	5,436,279	4,851,606	5,526,839	94,842	93,768	122,021
Ice-cream cans.....	540	701	1,098	399	825	1,820
Dairy milk cans:						
Number reported.....	866	831	1,704	2,278	2,197	3,979
Number not reported.....				280	382	
Other miscellaneous cans and packages:						
Number reported.....	2,846,122	3,109,046	2,908,272	82,496	99,918	120,965
Number not reported.....				6,777	8,048	8,563
Other tinware, except stamped <sup>3</sup> .....				5,685	4,701	5,727

<sup>1</sup> See sec. 25, p. 13.<sup>2</sup> Not comparable with figures for 1931 and 1933 because of change in classification.<sup>3</sup> Stamped tinware other than tin cans is classified in the "Stamped ware, enameled ware," etc., industry.



TABLE 3.—TIN CANS AND OTHER TINWARE—WAGE EARNERS, BY MONTHS, FOR SELECTED STATES: 1933 AND 1931

[For average for the year, see table 1. The month of maximum employment is indicated by **bold-faced** figures and that of minimum employment by *italic* figures. See sec. 28, p. 13]

	NUMBER REPORTED FOR—											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<i>United States</i>												
1933.....	19,768	20,086	20,058	20,898	22,167	23,853	24,655	26,554	<b>26,915</b>	25,197	24,430	25,534
1931.....	25,135	25,736	26,264	26,719	26,294	26,442	26,341	<b>27,211</b>	25,635	23,315	22,515	<i>21,846</i>
<i>States</i>												
California:												
1933.....	1,704	1,704	1,710	1,863	1,948	2,073	2,340	2,792	<b>2,841</b>	2,390	2,298	2,328
1931.....	2,335	2,500	2,465	<b>2,674</b>	2,536	2,306	2,550	2,661	2,121	1,861	<i>1,729</i>	1,769
Illinois:												
1933.....	5,958	4,076	4,039	4,196	4,633	5,233	5,247	<b>5,545</b>	5,464	5,834	5,204	5,413
1931.....	4,871	5,124	5,255	5,273	5,350	<b>5,414</b>	5,305	5,249	5,109	4,700	4,515	<i>4,550</i>
Louisiana:												
1933.....	559	453	555	591	651	647	586	647	659	661	<b>714</b>	673
1931.....	<b>830</b>	820	824	776	785	809	744	780	718	732	755	<i>694</i>
Maryland:												
1933.....	2,679	2,828	2,759	2,875	3,052	3,236	3,316	<b>3,917</b>	3,623	3,333	3,187	3,363
1931.....	3,904	3,904	3,966	<b>4,033</b>	3,862	3,728	3,766	3,957	3,657	3,300	<i>3,196</i>	3,217
Massachusetts:												
1933.....	467	460	456	449	<i>447</i>	476	501	479	495	532	<b>571</b>	565
1931.....	501	538	<b>551</b>	526	504	524	509	<i>485</i>	489	496	493	488
Michigan:												
1933.....	89	107	118	130	146	175	228	310	<b>322</b>	281	178	179
1931.....	232	216	236	<b>248</b>	161	173	87	99	124	164	172	187
Minnesota:												
1933 <sup>1</sup> .....	221	212	209	206	<i>205</i>	216	216	230	<b>248</b>	241	219	243
Missouri:												
1933.....	686	719	751	762	782	795	802	792	773	789	777	<b>816</b>
1931.....	899	906	883	907	898	914	885	853	<b>916</b>	890	889	<i>770</i>
New Jersey:												
1933.....	1,880	1,406	1,387	1,399	1,488	1,518	1,581	1,771	1,764	1,750	1,840	<b>1,855</b>
1931.....	1,707	1,724	1,718	1,687	1,631	1,800	1,847	<b>2,314</b>	1,657	1,595	1,587	<i>1,559</i>
New York:												
1933.....	2,715	2,695	<b>2,638</b>	2,638	2,659	2,827	2,897	2,997	3,273	3,252	3,296	<b>3,357</b>
1931.....	3,174	3,195	3,144	<b>3,211</b>	3,147	3,209	3,098	3,086	3,105	2,885	2,955	<i>2,882</i>
Ohio:												
1933.....	1,447	1,533	1,513	1,521	1,616	1,789	1,885	1,882	<b>1,975</b>	1,833	1,752	1,688
1931.....	1,983	1,984	1,998	2,042	2,074	2,099	2,219	2,214	<b>2,296</b>	1,948	1,755	<i>1,591</i>
Pennsylvania:												
1933.....	1,348	1,373	1,386	1,441	1,485	1,551	1,557	1,681	<b>1,738</b>	1,474	<i>1,329</i>	1,555
1931.....	<i>1,561</i>	1,368	1,618	1,669	1,636	1,672	<b>1,750</b>	1,658	1,715	1,608	1,582	1,491
Texas:												
1933.....	395	364	379	432	477	457	508	443	444	453	<b>525</b>	519
1931.....	<b>487</b>	481	473	468	407	453	430	406	413	416	420	<i>399</i>
Washington:												
1933.....	200	223	260	321	327	336	<b>409</b>	368	315	246	246	232
1931.....	261	357	401	480	493	454	366	<b>535</b>	354	<i>203</i>	227	216
Wisconsin:												
1933.....	165	<i>162</i>	170	<i>162</i>	164	177	199	201	<b>206</b>	200	200	194
1931.....	166	172	172	<b>184</b>	171	167	161	133	125	<i>109</i>	127	131

<sup>1</sup> The 1931 figures are withheld to avoid disclosing data for individual establishments.

## TIN PLATE AND TERNEPLATE

**Description of the industry.**—This industry, as defined for census purposes, consists in the coating of black plates with tin or with terne mixture (an alloy of tin and lead, in varying proportions). The manufacture of black plates is a rolling-mill operation, and 31 of the 32 tin-plate and terneplate establishments which reported for 1933 were operated as dipping departments of the mills which rolled the plates. The other establishment was operated by a tin-can manufacturer who did no rolling but purchased black plates for coating.

The numbers of wage earners, amounts of wages paid, cost of materials, etc., are not reported separately for the dipping departments of rolling mills and other establishments which operate such departments, but are included in the respective items for the "Steel-works and rolling-mill products" and the "Tin cans and other tinware" industries.

**TIN PLATE AND TERNEPLATE—PRODUCTION, BY KIND, QUANTITY, AND VALUE AND EQUIPMENT, BY NUMBER OF SETS AND CAPACITY: 1927 TO 1933**

	1933	1931	1929	1927
Number of establishments.....	32	31	31	30
<b>PRODUCTS</b>				
Total value.....	\$151,601,254	\$142,697,503	\$213,084,656	\$193,894,382
Tin plate and terneplate:				
Total pounds.....	3,962,956,085	3,268,025,278	4,377,448,538	3,753,474,411
Total value.....	\$148,770,839	\$140,984,351	\$209,675,187	\$190,426,776
Tin plate:				
Total pounds.....	3,764,702,348	3,108,668,090	4,031,856,278	3,560,417,694
Total value.....	\$142,434,487	\$135,374,970	\$194,107,222	\$180,410,038
Coke plate:				
Pounds.....	3,744,404,436	3,071,029,750	3,958,323,114	3,499,540,357
Value.....	\$141,452,854	\$133,193,780	\$189,050,613	\$176,432,417
Charcoal plate:				
Pounds.....	20,297,912	37,638,340	73,533,164	60,877,337
Value.....	\$981,633	\$2,181,190	\$5,056,009	\$3,977,621
Terneplate, including long terne:				
Pounds.....	198,253,737	159,357,188	345,592,260	193,056,717
Value.....	\$6,336,352	\$5,609,381	\$15,567,965	\$10,016,738
Other products, including tin dross, scruff, scrap, etc., value.....	\$2,830,415	\$1,713,152	\$3,409,409	\$3,467,606
<b>EQUIPMENT, ACTIVE PLANTS</b>				
Number of dipping sets at end of year, total.....	479	482	509	517
Tin plate:				
Mechanical.....	385	387	370	356
Hand-fed.....	63	57	94	119
Terneplate.....	31	38	45	42
Daily capacity (24-hour basis), total pounds.....	22,516,695	21,896,120	20,846,020	19,225,305
Tin plate.....	20,749,375	19,661,820	19,314,120	17,857,789
Terneplate.....	1,767,320	1,734,300	1,531,900	1,367,516
Number of sets building.....	5	3	2	9

## WIRE DRAWN FROM PURCHASED RODS; WIREWORK NOT ELSEWHERE CLASSIFIED

[Preliminary reports for these industries were issued on Oct. 31, 1934]

**Description of the industries.**—The "Wire drawn from purchased rods" industry, as defined for census purposes, consists in the drawing of wire from purchased rods of iron, steel, copper, or other metals, and does not, therefore, include production by the wire-drawing departments of iron, steel, copper, and other rolling mills. As will be seen by reference to table 2, the output of wire and wire products by the wire departments of steel works and rolling mills exceeds that reported for mills in the wire industry. Some of the establishments in this industry manufacture various fabricated-wire products of the same classes as those made by establishments in other industries. (See "Production of wire and wire products, all industries," below.)

The "Wirework not elsewhere classified" industry embraces establishments engaged in the manufacture, from purchased wire, of commodities such as woven-wire fencing, fly screening, wire cloth and netting, Fourdrinier and cylinder wire cloth, wire rope and cable, barbed wire, tire chains, bale ties, concrete-reinforcing wire, welding wire, wire guards, partitions and grille work, wire trays and baskets, kitchen wire goods, and wire springs. It does not cover plants that manufacture insulated wire from purchased plain wire, such plants being classified in the "Electrical machinery, apparatus, and supplies" industry.

**Production of wire and wire products, all industries.**—In many cases establishments engaged in drawing wire also operate fabricating departments in which they manufacture nails, woven-wire fencing, insulated wire, and other fabricated-wire products. When these products are manufactured by establishments which do not draw their own wire, they are normally classified in other industries, particularly "Wirework not elsewhere classified" and "Electrical machinery, apparatus, and supplies." Table 2 of this report shows separately the values of wire and wire products manufactured in each of the several industries, and table 3 covers the total production of wire and of the chief classes of wire products reported by establishments in all industries in which wire and wire products are made. The figures do not, however, include data for certain products which, although made from purchased wire, are not usually considered as wire products; for example, needles and pins, bolts, and many minor items of hardware.

**Extent of coverage.**—All the establishments in the "Wire drawn from purchased rods" industry that reported at the census for 1931 were accounted for in the canvass for 1933. The 1933 coverage of the establishments reporting in the "Wirework not elsewhere classified" industry for 1931 was practically complete. Of the 494 such establishments, 38 failed to supply any information in regard to their status (active, idle, etc.) or their activities in 1933, but these estab-

lishments accounted for less than 1 percent of the total number of wage earners and of the total value of products reported for the industry for 1931.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1929 TO 1933, AND FOR STATES, 1933 AND 1931

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
Thousands of dollars. (See sec. 25, p. 13)								
WIRE DRAWN FROM PURCHASED RODS								
United States								
1933.....	78	1,933	14,656	3,448	14,321	39,615	75,476	35,861
1931.....	82	(4)	14,476	(4)	17,179	45,187	83,370	38,183
1929 <sup>4</sup> .....	81	2,554	22,467	6,979	35,110	126,182	213,997	87,815
States								
California:								
1933 <sup>5</sup> .....	3	18	145	35	135	680	1,279	598
Connecticut:								
1933.....	5	96	657	168	702	1,635	3,788	2,153
1931.....	5	(4)	666	(4)	848	1,509	3,912	2,403
Illinois:								
1933.....	11	437	2,719	698	2,487	10,697	17,958	7,261
1931.....	11	(4)	2,608	(4)	2,989	11,317	17,982	6,665
Indiana:								
1933.....	5	135	917	180	737	3,175	5,205	2,030
1931.....	5	(4)	1,828	(4)	1,966	5,542	9,976	4,434
Massachusetts:								
1933.....	12	331	3,138	613	3,410	5,776	12,841	7,065
1931.....	12	(4)	3,038	(4)	3,534	5,181	12,830	7,649
New Jersey:								
1933.....	12	331	1,899	648	1,816	5,199	10,338	5,139
1931.....	13	(4)	1,645	(4)	1,870	4,978	9,617	4,638
New York:								
1933 <sup>6</sup> .....	4	45	911	177	1,151	1,764	4,373	2,609
Ohio:								
1933.....	6	105	1,411	178	1,381	3,344	6,647	3,303
1931.....	7	(4)	1,116	(4)	1,508	3,513	6,847	3,334
Pennsylvania:								
1933.....	10	222	1,287	373	1,246	2,891	5,789	2,898
1931.....	11	(4)	1,451	(4)	1,701	5,113	8,645	3,532
Other States: <sup>7</sup>								
1933.....	10	213	1,571	378	1,257	4,453	7,258	2,805
1931.....	18	(4)	2,124	(4)	2,462	8,034	13,562	5,528
WIREWORK NOT ELSEWHERE CLASSIFIED								
United States								
1933.....	429	2,637	17,633	4,278	14,155	35,220	74,520	39,300
1931.....	494	(4)	17,226	(4)	17,382	40,308	86,694	46,386
1929.....	547	3,221	22,888	9,589	27,912	68,144	146,805	78,661
1927.....	512	3,477	21,697	9,436	26,439	63,093	128,536	65,443
States								
California:								
1933.....	31	139	613	244	563	1,811	3,608	1,797
1931.....	28	(4)	576	(4)	616	1,663	3,695	2,032
Connecticut:								
1933.....	25	209	1,338	294	1,145	1,947	4,676	2,729
1931.....	24	(4)	1,215	(4)	1,260	2,047	4,808	2,760
Illinois:								
1933.....	52	315	1,833	516	1,495	4,002	9,329	5,328
1931.....	58	(4)	1,611	(4)	1,633	4,260	9,122	4,862
Indiana:								
1933.....	14	91	699	142	504	1,647	2,825	1,178
1931.....	18	(4)	775	(4)	666	2,028	3,443	1,415

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1929 TO 1933, AND FOR STATES, 1933 AND 1931—Continued

[See sec. 26, p. 13]

	Number of establishments	Number of salaried employees <sup>1</sup>	Number of wage earners (average for the year)	Salaries <sup>2</sup>	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>3</sup>
				Thousands of dollars. (See sec. 25, p. 13)				
WIREWORK NOT ELSEWHERE CLASSIFIED—continued								
States—Continued								
Iowa:								
1933.....	6	26	211	71	164	639	1,031	392
1931.....	6	( <sup>4</sup> )	131	( <sup>4</sup> )	135	399	742	344
Maryland:								
1933.....	11	84	247	125	167	650	1,531	882
1931.....	16	( <sup>4</sup> )	255	( <sup>4</sup> )	271	1,306	2,325	1,019
Massachusetts:								
1933.....	26	141	933	175	831	1,619	3,402	1,783
1931.....	21	( <sup>4</sup> )	944	( <sup>4</sup> )	1,007	1,817	3,886	2,069
Michigan:								
1933.....	34	424	4,851	314	3,646	7,647	15,312	7,665
1931.....	38	( <sup>4</sup> )	4,280	( <sup>4</sup> )	4,117	8,201	17,366	9,166
Minnesota:								
1933.....	9	17	109	23	76	176	460	283
1931.....	8	( <sup>4</sup> )	136	( <sup>4</sup> )	136	282	645	364
Missouri:								
1933.....	8	176	462	276	411	1,862	3,876	2,014
1931.....	11	( <sup>4</sup> )	523	( <sup>4</sup> )	479	1,871	3,974	2,104
New Jersey:								
1933.....	20	63	497	111	578	688	1,922	1,234
1931.....	30	( <sup>4</sup> )	710	( <sup>4</sup> )	983	1,414	3,803	2,389
New York:								
1933.....	70	311	1,843	392	1,442	3,272	6,985	3,713
1931.....	93	( <sup>4</sup> )	1,907	( <sup>4</sup> )	2,107	4,177	9,988	5,811
Ohio:								
1933.....	36	298	1,640	589	1,377	3,361	7,788	4,427
1931.....	40	( <sup>4</sup> )	1,011	( <sup>4</sup> )	1,306	3,269	7,089	3,820
Oregon:								
1933 <sup>5</sup> .....	3	3	9	5	9	31	56	25
Pennsylvania:								
1933.....	43	242	1,843	313	1,295	4,772	9,336	4,564
1931.....	54	( <sup>4</sup> )	2,311	( <sup>4</sup> )	1,969	6,218	12,739	6,522
Rhode Island:								
1933.....	5	8	37	11	30	60	138	78
1931.....	5	( <sup>4</sup> )	41	( <sup>4</sup> )	48	82	172	90
Tennessee:								
1933 <sup>6</sup> .....	3	10	122	19	75	194	335	142
Texas:								
1933.....	6	12	39	31	41	165	378	212
1931.....	6	( <sup>4</sup> )	33	( <sup>4</sup> )	39	138	242	104
Wisconsin:								
1933.....	16	47	260	101	272	412	1,126	715
1931.....	17	( <sup>4</sup> )	257	( <sup>4</sup> )	298	345	1,007	662
Other States: <sup>7</sup>								
1933.....	11	21	49	27	32	265	406	141
1931.....	21	( <sup>4</sup> )	510	( <sup>4</sup> )	313	791	1,646	855

<sup>1</sup> Not including proprietors and firm members as follows: "Wire drawn from purchased rods," 1933, 1; 1931, no data; 1929, 3. "Wirework not elsewhere classified," 1933, 142; 1931, no data; 1929, 294; 1927, 274.

<sup>2</sup> The figures for 1933 do not include data for number and compensation of salaried officers of corporations, and therefore are not strictly comparable with the corresponding figures for 1929, in which such data are included. No data for employees of central administrative offices are included in the figures for any year.

<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.

<sup>4</sup> No data.

<sup>5</sup> Because of the transfer of certain establishments from this to another industry at the census for 1929, the figures for 1927 and earlier years are not strictly comparable with those for 1929 and subsequent years, and therefore are not presented in this table.

<sup>6</sup> Figures for 1931 included in those for "Other States" to avoid disclosing, exactly or approximately, any data for individual establishments.

<sup>7</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Ala., 0, 1; Calif., 1931, 2; Maine, 1, 1; Md., 1, 1; Mich., 3, 3; Mo., 1, 1; N. Y., 1931, 5; R. I., 1, 0; Tex., 1, 1; Wis., 2, 3.

<sup>8</sup> States included and numbers of establishments reporting for 1933 and 1931, respectively, are: Ala., 2, 2; Colo., 0, 1; Kans., 1, 2; Ky., 0, 2; La., 1, 1; Nebr., 1, 2; Okla., 2, 1; Oreg., 1931, 2; S. C., 1, 1; Tenn., 1931, 3; Va., 0, 2; Wash., 3, 2.

TABLE 2.—WIRE AND WIRE PRODUCTS—PRODUCTION, BY INDUSTRY AND BY VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929

INDUSTRY AND KIND	VALUE		
	1933	1931	1929
1. "Wire drawn from purchased rods" industry, all products, total value.....	\$75, 475, 581	\$83, 370, 125	\$213,997,410
2. Plain wire made for sale and for interplant transfer.....	31, 666, 005	33, 377, 187	95, 126, 565
3. Fabricated wire products.....	37, 193, 081	43, 391, 654	97, 313, 199
4. Other products (not normally belonging to the industry) and receipts for custom drawing.....	6, 616, 495	6, 601, 284	21, 557, 646
5. "Wirework not elsewhere classified" industry, all products, total value.....	74, 520, 498	86, 693, 807	146, 805, 049
6. Fabricated wire products.....	69, 322, 829	79, 916, 576	135, 865, 696
7. Other products (not normally belonging to the industry).....	5, 197, 669	6, 777, 231	10, 939, 353
8. Wire and wire products made by wire-drawing departments of steel works and rolling mills:			
9. Plain wire for sale and for interplant transfer.....	36, 346, 639	36, 096, 566	83, 562, 304
10. Fabricated wire products.....	55, 141, 076	63, 222, 372	116, 634, 982
11. Wire and wire products made by wire-drawing departments of nonferrous rolling mills and other establishments (except steel works and rolling mills):			
12. Plain wire made for sale and for interplant transfer.....	17, 168, 646	30, 509, 173	104, 372, 625
13. Fabricated wire products.....	15, 416, 647	48, 710, 394	56, 499, 863
14. Fabricated wire products made as secondary products in other industries.....	36, 163, 188	68, 181, 844	230, 612, 797
Plain wire for sale and for interplant transfer, total (2, 9, and 12).....	85, 181, 290	99, 982, 926	283, 061, 494
Fabricated wire products, total (3, 6, 10, 13, and 14).....	213, 236, 821	308, 422, 840	636, 926, 637

¹ Revised.

TABLE 3.—WIRE AND WIRE PRODUCTS—PRODUCTION, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929

[Ton, 2,000 pounds; keg, 100 pounds]

CLASS AND KIND	QUANTITY ¹			VALUE IN THOUSANDS OF DOLLARS ¹		
	1933	1931	1929	1933	1931	1929
Bare wire (made for sale and for interplant transfer).....				85, 181	99, 983	283, 061
Iron and steel wire:						
Plain wire, total.....	Tons 1, 962, 076	Tons 1, 865, 758	Tons 3, 097, 239			
Made for sale.....	611, 169	531, 129	1, 074, 076	39, 856	35, 661	78, 992
Transferred for consumption in other plants of same company.....	55, 819	72, 156	129, 567	3, 730	4, 831	9, 484
Produced and consumed in same works, including that subsequently galvanized or otherwise coated and cold-rolled.....	21, 295, 088	21, 262, 473	21, 893, 596			
Galvanized wire, total.....	552, 472	568, 767	843, 195			
Made for sale and for interplant transfer.....	167, 925	171, 722	268, 793	9, 936	10, 963	19, 656
Produced and consumed in same works.....	384, 547	397, 045	574, 402			
Other coated wire, total.....	37, 199	46, 888	57, 047			
Made for sale and for interplant transfer.....	33, 575	43, 398	52, 242	4, 184	5, 164	8, 143
Produced and consumed in same works.....	3, 624	3, 490	4, 805			
Cold-rolled from drawn wire, total.....	17, 479	27, 585	43, 028			
Made for sale and for interplant transfer.....	15, 434	13, 726	28, 757	2, 882	2, 361	4, 256
Produced and consumed in same works.....	2, 045	13, 859	14, 271			

For footnotes, see end of table.

CENSUS OF MANUFACTURES: 1933

3.—WIRE AND WIRE PRODUCTS—PRODUCTION, BY KIND, QUANTITY,  
VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929—Continued

[Ton, 2,000 pounds; keg, 100 pounds]

CLASS AND KIND	QUANTITY <sup>1</sup>			VALUE IN THOUSANDS OF DOLLARS <sup>1</sup>		
	1933	1931	1929	1933	1931	1929
Copper wire, total.....	<i>M lb.</i> 268,188	<i>M lb.</i> 455,882	<i>M lb.</i> 1,104,497			
Made for sale and for interplant transfer.....	99,135	187,921	544,740	10,305	22,884	118,628
Produced and consumed in same works.....	159,379	242,390	407,996			
Drawn on contract or custom basis from rods owned by others.....	9,673	25,572	151,761			
Brass and bronze wire, total.....	62,506	53,098	92,386			
Made for sale.....	50,064	43,629	81,483	6,894	7,293	19,092
Transferred for consumption in other plants of same company.....	4,950	4,402	5,323	633	611	1,241
Produced and consumed in same works.....	4,997	5,066	5,581			
Drawn on contract or custom basis from rods or bars owned by others.....	2,495					
Other nonferrous wire, <sup>4</sup> total.....		26,781	48,508			
Made for sale and for interplant transfer: Quantity reported.....	14,902	26,750	48,487	6,447	10,214	23,590
Quantity not reported.....				313		
Produced and consumed in same works.....	47	31	21			
Wire products, total value.....				213,237	303,423	636,927
Iron and steel wire products, total value.....				138,122	162,298	288,452
Nails, brads, and spikes, total <sup>6</sup> .....	<i>M kegs</i> 9,101	<i>M kegs</i> 8,177	<i>M kegs</i> 13,601	24,312	22,532	44,935
Bright, not including galvanized and other coated.....	7,327	6,469	10,302	18,154	16,548	31,733
Galvanized.....	678	584	1,008	2,895	2,674	5,385
Cement-coated.....	1,096	1,124	2,290	3,263	3,310	7,811
Tacks, wire: <sup>6</sup>	<i>M lb.</i>	<i>M lb.</i>	<i>M lb.</i>			
Quantity reported.....	3,182	2,620	6,540	263	218	640
Quantity not reported.....				111		
Staples, wire:	<i>M lb.</i>	<i>M lb.</i>	<i>M lb.</i>			
Quantity reported.....	55,353	44,863	58,879	1,483	1,385	2,342
Quantity not reported.....				273		
Barbed wire, plain and coated.....	<i>Tons</i> 182,441	<i>Tons</i> 161,813	<i>Tons</i> 221,809	8,608	8,280	13,824
Rope and cable, except insulated.....	49,020	57,289	153,304	13,615	18,412	46,877
Strand, galvanized.....	20,080	35,580	48,565	2,098	3,284	5,618
Poultry netting.....	29,304	31,988	46,733	3,725	4,165	7,536
Woven-wire fence, except poultry netting.....	203,357	242,295	365,505	13,907	17,897	31,041
Fly screening.....	<i>M lb.</i> 46,856	<i>M lb.</i> 31,719	<i>M lb.</i> 64,728	6,264	4,623	9,942
Other wire cloth:	<i>M lb.</i>	<i>M lb.</i>	<i>M lb.</i>			
Quantity reported.....	22,522	24,949	31,107	2,784	4,177	4,996
Quantity not reported.....						1,559
Concrete-reinforcement wire:	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>			
Quantity reported.....	54,990	140,131		2,962	8,177	
Quantity not reported.....				703		
Wire lath.....	8,356	10,132	138,830	378	798	11,786
Other woven wire.....	19,712	17,702		4,459	4,723	
Bale ties.....	<i>M lb.</i> 124,090	<i>M lb.</i> 109,349	<i>M lb.</i> 148,474	3,680	3,593	5,088
Wire springs, total.....				24,104	26,686	47,903
Furniture and other upholstery (in- cluding mattress) springs.....				14,168	15,093	25,344
Valve springs for internal-combustion engines.....				812	1,885	3,315
Miscellaneous spiral springs.....				4,393	5,629	10,955
Flat springs, coiled.....				1,672	1,801	3,107
Other wire springs.....				3,060	2,878	5,182

For footnotes, see end of table.

TABLE 3.—WIRE AND WIRE PRODUCTS—PRODUCTION, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1933, 1931, AND 1929—Continued

[Ton, 2,000 pounds; keg, 100 pounds]

CLASS AND KIND	QUANTITY <sup>1</sup>			VALUE IN THOUSANDS OF DOLLARS <sup>1</sup>		
	1933	1931	1929	1933	1931	1929
Iron and steel wire products—Continued.						
Automobile skid chains:						
Quantity reported.....	Tons 11,878	Tons 22,375	Tons 31,445	2,753	5,285	8,987
Quantity not reported.....				584	702	2,504
Other chain.....	14,364			2,569	1,558	
Welding wire <sup>2</sup> .....	M lb. 23,328	M lb. 22,795		1,581	1,427	42,872
Other fabricated iron and steel wire products <sup>3</sup> .....				16,955	24,378	
Nonferrous wire products:						
Fly screening:						
Copper and bronze.....	9,697			2,324	3,160	5,104
Other metals.....	91	9,829	15,204	64		
Fourdrinier and cylinder wire cloth.....	1,985	1,899	3,108	3,189	3,082	4,765
Other nonferrous wire cloth:						
Quantity reported.....	2,488	1,625	2,618	1,073	1,235	1,271
Quantity not reported.....				154		
Copper strand, not insulated.....	24,771	59,051	92,395	2,480	7,383	18,617
Other fabricated nonferrous wire products, except insulated wire.....				2,350	5,670	6,125
Fabricated-wire products not reported by kind.....				2,255	897	
Insulated wire and cable, total <sup>10</sup> .....				61,226	120,197	312,592
Rubber-insulated:						
Lighting and power circuit:						
Braided.....				12,788	22,675	51,131
Leaded.....				3,089	8,859	23,037
Telephone.....				8,262	6,649	11,742
Flexible cords (rubber-insulated, cotton, and silk covered).....				6,650	7,717	20,189
Cotton-insulated, weatherproof.....				5,614	13,056	42,012
Paper-insulated:						
Lighting and power circuit.....				3,238		
Telephone and telegraph cable (including submarine).....				2,794	37,021	96,228
Varnished-cambric insulated.....				1,979	3,389	7,210
Magnet:						
Cotton and silk covered.....				5,156	4,878	18,777
Enameled.....				4,985	6,158	30,641
Cotton insulated slow-burning, and asbestos-insulated.....				1,634	2,530	
Other insulated wire and that not distributed by kind of insulation.....				10,039	7,265	11,625

<sup>1</sup> See sec. 25, p. 13.<sup>2</sup> Includes negligible amounts of wire drawn on contract.<sup>3</sup> For production of cold-rolled strip steel, see table 4, p. 464, "Steel-works and rolling-mill products" report.<sup>4</sup> Aluminum, nickel, and alloys.<sup>5</sup> Revised.<sup>6</sup> For production of cut nails and spikes and cut tacks, see table 4, p. 464, "Steel-works and rolling-mill products" report.<sup>7</sup> Not comparable with figures for later years, as data for concrete reinforcement wire and wire lath were not separately reported prior to 1931 and were probably included in part in figure for "Other fabricated iron and steel wire products," *infra*.<sup>8</sup> Not including electrodes. For production of electrodes, see report for "Electrical machinery, apparatus, and supplies."<sup>9</sup> Wire guards, garment hangers, partitions and grilles, lamp-shade frames, kitchen wire goods, baskets, cages, florists' designs, etc.<sup>10</sup> For production of armored cable, see "Armored conductor" under "Conduit, fittings, and armored cable" in report for "Electrical machinery, apparatus, and supplies."



TABLE 4.—WIRE DRAWN FROM PURCHASED RODS—WAGE EARNERS, BY MONTHS, FOR SELECTED STATES: 1933 AND 1931

[For average for the year, see table 1. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 26, p. 13]

	NUMBER REPORTED FOR—											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<i>United States</i>												
1933.....	<i>11, 818</i>	11, 589	11, 228	11, 292	11, 951	13, 249	15, 355	17, 646	18, 627	18, 253	17, 653	17, 817
1931.....	15, 741	15, 490	15, 519	15, 234	14, 786	14, 399	14, 113	13, 922	13, 880	13, 923	13, 391	<i>13, 329</i>
<i>States</i>												
California:												
1933.....	<i>120</i>	132	134	135	142	138	149	157	157	162	154	165
Connecticut:												
1933.....	570	571	574	<i>546</i>	549	577	645	758	783	782	759	773
1931.....	733	722	736	732	723	635	687	684	<i>522</i>	607	613	597
Illinois:												
1933.....	<i>1, 903</i>	2, 140	2, 208	2, 284	2, 385	2, 653	3, 000	3, 271	3, 428	3, 121	2, 977	3, 256
1931.....	3, 012	2, 965	2, 897	2, 842	2, 639	2, 560	2, 573	2, 327	2, 318	2, 422	<i>2, 306</i>	2, 432
Indiana:												
1933.....	978	971	763	815	720	839	868	994	977	1, 003	1, 025	1, 056
1931.....	1, 884	1, 714	1, 710	1, 809	1, 660	<i>1, 691</i>	1, 784	1, 976	2, 055	2, 173	1, 801	1, 785
Massachusetts:												
1933.....	2, 433	2, 408	2, 327	<i>2, 259</i>	2, 441	2, 777	3, 332	3, 704	3, 967	3, 993	3, 965	3, 962
1931.....	3, 304	3, 247	3, 259	3, 104	3, 062	3, 126	2, 907	2, 952	2, 885	<i>2, 805</i>	2, 909	2, 900
Michigan:												
1933.....	<i>543</i>	590	580	625	736	809	1, 079	1, 585	1, 708	1, 544	1, 187	1, 086
1931.....	<i>668</i>	575	671	723	730	682	656	647	813	750	648	636
New Jersey:												
1933.....	1, 457	1, 440	1, 465	<i>1, 397</i>	1, 486	1, 668	2, 003	2, 214	2, 441	2, 457	2, 396	2, 360
1931.....	1, 764	1, 887	1, 723	1, 734	1, 705	1, 601	1, 555	1, 631	1, 615	1, 566	1, 497	<i>1, 462</i>
New York:												
1933.....	630	657	648	669	781	854	921	1, 075	1, 153	1, 192	1, 172	1, 181
1931.....	913	930	927	915	916	896	866	847	828	820	831	803
Ohio:												
1933.....	1, 083	1, 127	<i>1, 063</i>	1, 087	1, 134	1, 222	1, 430	1, 675	1, 826	1, 777	1, 765	1, 748
1931.....	1, 233	1, 215	1, 237	1, 247	1, 228	1, 157	1, 045	1, 040	<i>960</i>	987	995	1, 042
Pennsylvania:												
1933.....	1, 074	1, 076	<i>1, 007</i>	1, 052	1, 106	1, 223	1, 370	1, 463	1, 484	1, 496	1, 528	1, 567
1931.....	1, 741	1, 623	1, 755	1, 502	1, 517	1, 560	1, 497	1, 268	1, 326	1, 256	1, 238	<i>1, 127</i>

<sup>1</sup> Figures for 1931 withheld to avoid disclosing data for individual establishments.

TABLE 5.—WIREWORK NOT ELSEWHERE CLASSIFIED—WAGE EARNERS, BY QUARTERS, FOR SELECTED STATES: 1933 AND 1931

[The average for the year (table 1) differs from the average of the quarterly figures below. (See fourth sentence, sec. 13, p. 8.) See sec. 26, p. 13]

	1933 <sup>1</sup>				1931			
	March	June	Sept.	Dec.	March	June	Sept.	Dec.
United States.....	14,393	17,867	20,612	19,023	18,959	17,141	16,347	16,169
<i>States</i>								
California.....	485	593	779	712	644	568	565	519
Connecticut.....	1,146	1,334	1,498	1,438	1,240	1,228	1,232	1,131
Illinois.....	1,341	1,899	2,321	1,836	1,747	1,606	1,546	1,419
Indiana.....	556	722	816	755	896	723	705	736
Iowa.....	160	235	223	214	149	138	103	96
Maryland.....	181	232	302	255	279	257	240	278
Massachusetts.....	882	956	1,001	964	962	924	928	943
Michigan.....	3,842	5,254	5,727	5,133	5,085	4,718	3,561	4,033
Minnesota.....	105	123	97	114	145	145	133	116
Missouri.....	436	462	483	479	555	513	500	486
New Jersey.....	429	468	568	545	718	695	712	679
New York.....	1,527	1,726	2,330	1,787	1,918	1,740	2,060	1,766
Ohio.....	1,450	1,661	1,782	1,751	1,108	1,114	983	896
Oregon.....	7	10	9	10	(?)	(?)	(?)	(?)
Pennsylvania.....	1,444	1,690	2,062	2,476	2,518	1,902	2,332	2,355
Rhode Island.....	34	38	40	38	45	30	43	42
Tennessee.....	84	151	161	86	77	65	68	56
Texas.....	34	35	44	42	31	32	41	27
Washington.....	10	20	25	20	(?)	(?)	(?)	(?)
Wisconsin.....	218	237	321	307	294	249	238	230

<sup>1</sup> See sec. 5, p. 4 and sec. 13, p. 8. The 285 establishments canvassed with the standard schedule reported wage earners, by months, as follows:

January.....	14,130	May.....	15,219	September.....	19,796
February.....	14,374	June.....	17,149	October.....	19,259
March.....	13,793	July.....	18,582	November.....	18,198
April.....	14,198	August.....	19,903	December.....	18,240

<sup>2</sup> Withheld to avoid disclosing data for individual establishments.